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LEAFLET

TP 2436

FEUILLET



SCHOOL BUS DEMONSTRATION PROJECT

REARWARD FACING SEATS WITH LAP BELTS

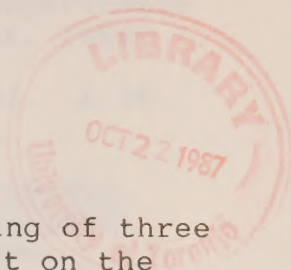
BACKGROUND

In 1984, Transport Canada's crash testing of three school buses indicated that the use of a lap belt on the existing forward facing seats could increase the risk of head injuries to occupants during a severe frontal collision. During such a collision, the occupant would pivot about the lap belt and strike his or her head on the seat back in front.

In 1986, Transport Canada completed a research study to design, fabricate and test five different seating systems, each using a seat belt system, in an effort to improve protection for students in case of an accident. Briefly, the testing of the various seating systems showed that the rearward facing mode provided the greatest potential for increasing occupant protection during frontal and near frontal collisions. During a head-on collision, the crash forces are spread over the back of a rearward facing occupant instead of being concentrated in the head area.

DEMONSTRATION PROJECT

During the next school year, Transport Canada will be conducting a demonstration project, in conjunction with four school boards across Canada. Three new Blue Bird school buses will be modified by replacing the normal forward facing seats with seats that face toward the rear of the bus. Each rearward facing seat will incorporate a lap seat belt, with automatic locking retractors, for each seating position. An automatic locking retractor is a simple seat belt retractor that automatically locks the seat belt in place when it is positioned around the occupant. It is the same type of retractor found in the rear seats of most passenger cars. The seats will be approximately twenty five centimetres (10 inches) higher than existing seats to provide adequate head restraint for the seat occupants. These buses will be used throughout the school year on regular routes, in place of a normal bus.



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The location of the buses will be as follows:

School District No. 36, SURREY, B.C., through the cooperation of the Association of Transportation Supervisors of British Columbia, Mr. Jerry Kutzschan, President, (604) 576-8714. Media contact - Mr. Leigh Anderson, Secretary-Treasurer of School Board, (604) 596-7733. A 48 passenger bus will be used throughout the year.

The Board of Education for the CITY OF TORONTO, through the cooperation of Mr. Stanley Draffin, Assistant Superintendent-Curriculum, (416) 458-4931 and All-Way Transportation Corp., Scarborough. Media contact at school board - Mr. Brian Smith, (416) 458-4931. A 22 passenger bus will be used throughout the year.

Kings County District School Board, KENTVILLE, N.S. through the cooperation of Mr. Perry Jackson, Director of Support Services, (902) 678-2161, Mr. Jackson will also be the media spokesman. A 66 passenger bus will be used in this school district from September until January

Northside-Victoria District School Board, NORTH SYDNEY, N.S., through the cooperation of Mr. Wally King, Supervisor of Conveyance, (902) 794-4721. The 66 passenger bus will be used in this school district from February to June, 1988.

The purpose of this project is to determine whether or not students will adapt to this type of seating arrangement and whether or not they will wear their lap belts at all times. Transport Canada will also document any problems that bus drivers may experience with students facing the rear.

During the course of the project, engineers from Transport Canada will visit each school district to ensure that the bus and all of its equipment are fully maintained to ensure maximum safety. The bus operator will also report any malfunctions to Transport Canada so that any necessary corrective action can be taken immediately.

ASSESSMENT OF PROGRAM

Everyone that is involved in the project will be asked to participate in the evaluation of the rear facing seats. Bus drivers will be asked to keep a log of any

positive or negative occurrences that they observe as a result of the seats facing to the rear, rather than to the front. The students will be asked to wear their seat belts at all times while riding the bus. Any problems that occur as a result of the seat belts being installed on the seats will be logged. Any comments, positive and negative, concerning the seats will be recorded. The schools will be asked to keep careful note of any parental comments that are expressed to them.

When the project is completed in 1988, the results will be carefully analysed and considered with the research and testing that has been done over the past several years. All the findings will be summarized in a background paper and presented to a public forum planned for the fall of 1988. The paper will be available to the general public and interested groups.

For further information contact:

Transport Canada,
Traffic Safety Standards and Research, Ottawa
Mr. Jerry Farr (613) 998-1963 or
Mr. Bill Gardner (613) 998-1961.

A number of questions may arise as a result of the operation of these buses. We have tried to anticipate some of these and provide answers to them.

1. WHY ARE SCHOOL BUSES SO SAFE, EVEN WITHOUT SEAT BELTS?

There are 35 federal standards that apply to the design and construction of school buses. These standards address such features as braking, lighting, emergency exits, seating strength and padding and body joint strength, fuel system protection. These standards ensure that occupants are contained between high-backed, heavily padded, closely spaced seats. This compartmentalization provides passive protection in case of an accident and was arrived at after many years of research and testing in the U.S..

Buses also operate at specific times of the day, on predetermined routes and employ special warning lights to warn motorists when they are stopped to load or unload passengers. They are a unique yellow colour and in many provinces employ a stop arm on the road side to provide an additional warning to motorists.

All these operating conditions and the construction features combine to make the buses an extremely safe mode of transportation.

2. IN ORDER TO MEASURE THE EFFECTIVENESS OF THE REARWARD FACING SEATS, WON'T THE BUS HAVE TO BE INVOLVED IN AN ACCIDENT?

Of course this is always a possibility, but a very remote one. School buses are the safest form of surface transportation in existence today. Our latest statistics show that a child is about 8 times safer riding on a school bus than he would be in the family car. The safety performance of the rearward facing seats has been verified in a series of simulated crash tests.

3. WHAT DO YOU EXPECT TO FIND OUT FROM THE OPERATION OF THESE BUSES?

We hope to determine whether or not students will be comfortable riding in the seats, whether they will become nauseous from facing to the rear and whether or not they will wear the seat belts. We also hope to obtain valuable information from the drivers of the buses concerning any increase or decrease in disciplinary problems and any other operational problems that may occur. We will be looking for such things as children missing their stop because they face the rear. The seat backs on these seats are 10 inches higher than normal and a small child that falls asleep may not be noticed by the driver until he completes his trip. Hopefully these things won't occur but we will be on the lookout for them.

4. SINCE ALL PROVINCES IN CANADA NOW HAVE SEAT BELT USE LEGISLATION, WHY HASN'T TRANSPORT CANADA MADE THE INSTALLATION OF BELTS MANDATORY IN SCHOOL BUSES?

A great deal of research has gone into the question of whether or not seat belts should be installed in school buses. In 1984, Transport Canada crash tested three different sizes of school buses, (one small bus, one van conversion type bus and one large bus) each containing unbelted and belted test dummies. This was done to determine the effect that the belts might have toward improving safety.

The dummies were instrumented to record forces on the head and chest. In general, the results showed that the belted dummies experienced more severe head injuries than the unbelted ones.

The belted dummies pivoted about the lap belt and hit their heads very hard on the seat back in front. This resulted in head injuries that were much greater than recorded for the unbelted dummies. This is because the unbelted dummies slid across the seat and contacted the seat back in front with their upper body, spreading the load over a much greater area.

These test results indicated to us that it was not a simple matter of adding seat belts to existing seats. If belts were to be considered, the whole seating compartment had to be taken into account.

5. IS TRANSPORT CANADA GOING TO MAKE MANUFACTURERS BUILD ALL SCHOOL BUSES WITH REARWARD FACING SEAT AND SEAT BELTS?

There is no intention to make rearward facing seats mandatory in school buses. The sled tests that were conducted showed that rearward facing seats have the greatest potential to improve the already excellent safety record of school buses. This demonstration is a research project to investigate operational problems that may occur with the rearward facing seating arrangement.

6. HOW MUCH WILL IT COST TO TURN ALL SEATS TO FACE REARWARD AND INSTALL SEAT BELTS?

The closest estimate that we have is that it would cost approximately \$60.00 per seat to modify the structure and install lap belts. For a 66 passenger bus, this would amount to a little over \$1300.00.

7. HAS ANYONE ELSE EVER TRIED BUILDING A BUS WITH BACKWARD FACING SEATS?

One or two school boards in the U.S. have tried it in the past, but not with seat belts installed or with the higher backed seats. Our project is unique in these regards.

8. WHY AREN'T THE FINES STIFFER FOR DRIVERS WHO PASS A STOPPED SCHOOL BUS WITH ITS WARNING LIGHTS FLASHING?

The operation of a school bus on the roads and highways comes under provincial jurisdiction, and that is an item they would have to deal with.

BIBLIOGRAPHY

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3. Davis Engineering Ltd., "SCHOOL BUS SEAT DEVELOPMENT
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4. Hendrick, B., unpublished report, "School Bus Accident
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ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR
VEHICLE ACCIDENTS: 1985 AND THE PAST TEN YEARS

This leaflet provides information on blood alcohol concentration (BAC) determined for drivers fatally injured in motor vehicle accidents in Canadian provinces. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹ which consists of data collected from provincial coroners' or medical examiners' reports and reports prepared by investigating police officers. These data are supplied by provincial agencies.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). For 1985, fatality data from Nova Scotia were added, leaving only Quebec, Newfoundland and the Territories unrepresented by the database.

In reporting of the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

- 1) The percentages expressed are the percent of drivers tested. Only about 80% of all fatally injured drivers across the eight provinces are tested and therefore the BACs of drivers not tested are unknown.
- 2) The data include only victims dying within 6 hours of the accident.
- 3) The data include only drivers of motorized road vehicles (Excluded are snowmobile and farm vehicle operators as well as bicyclists, pedestrians and passengers).

¹ The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

- 4) BACs are reported in milligrams per 100 milliliters of blood, e.g., .08 = 80 mg% BAC. The portion of drivers which had been drinking prior to the accident (BAC greater than 1 mg%) and the portion which were legally impaired (BAC exceeding 80 mg%) are shown separately in the following figures. For clarity, Figures 5 to 7 show only the percent legally impaired.

Figures 1 through 3 present data from eight provinces for 1985, the most recent year for which data are available. Figure 1 shows the percent of fatally injured drivers who had been drinking and the percent legally impaired for each province. Manitoba had the lowest percent of impairment (36.8%) among its fatally injured drivers, which compares to an average over all eight provinces of 42.3%. Note that the percentages for smaller provinces are less reliable (i.e., more subject to chance variation) than are those for larger provinces due to the fewer number of cases. Figure 2 shows that among different age groups, the highest rates of alcohol involvement and alcohol impairment occur among 21-35 year olds and are lowest for drivers over 45. Partitioning of the data by vehicle type (Figure 3) reveals that motorcyclists had the highest rates of alcohol use (61.2%) although the rates of impairment were about equal for motorcyclists, van/light truck and automobile drivers.

Figures 4 through 6 present data for a ten year period, 1976 to 1985. For consistency, only data from seven provinces are aggregated. (Nova Scotia is omitted because of its recent addition to the database.) Figure 4 clearly shows a downward trend from 1982 onward in both alcohol use and impairment rates of fatally injured drivers. Prior to that year, the data appear to follow no particular trend. Figure 5 shows that while males are much more likely to be impaired than are females, both sexes show a similar decline over the past four years, demonstrating that the downward trend is not confined to males (who make up the vast majority of driver fatalities). Figure 6 reveals that the overall downward trend is not exhibited equally among all age groups. Those age groups with the highest impairment rates (21-25 and 26-35) show little indication of declining impairment (except, perhaps in 1985), while the youngest group (under 21) and the oldest groups demonstrate similar decreases since 1982.

Figure 7 suggests diminishing impairment rates for all vehicle types shown. Tractor-trailers are not included in Figure 7 because the small number of fatalities among this group of drivers renders year-to-year fluctuations unreliable. Over the last two years, the steepest drop was for the van/light-truck category (from 59.3% to 43.2%). However, this drop may reflect a change in the distribution of ownership characteristics of this vehicle category, attributable to the penetration of mini-vans into the 'family vehicle' market from about 1983.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Place de Ville
Ottawa, Ontario
K1A 0N5

Figure 1
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Province; 1985
% of Tested Drivers

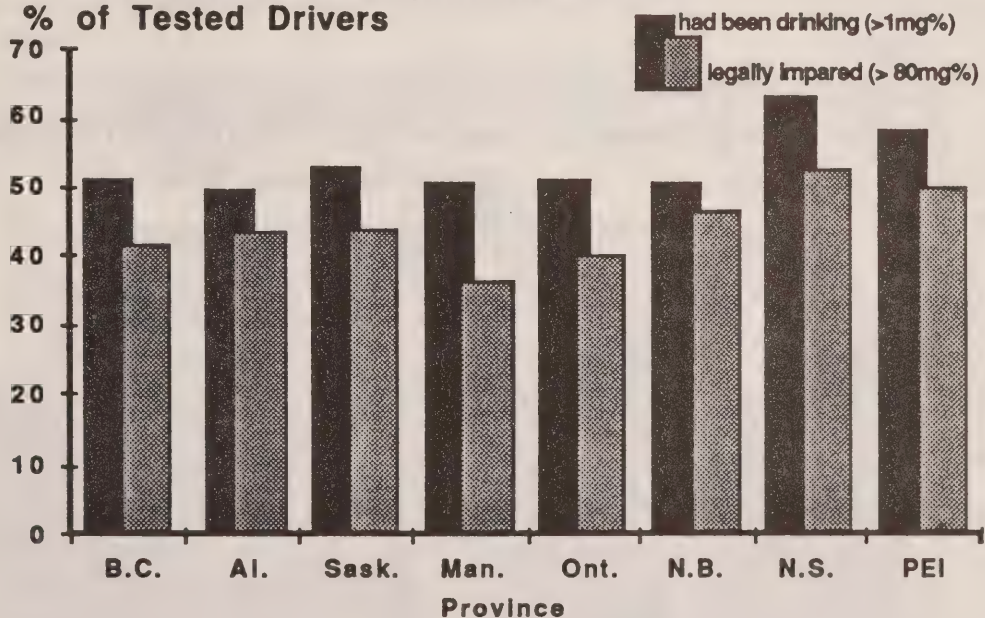


Figure 2

**Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Age: 1985 (Eight Provinces)**

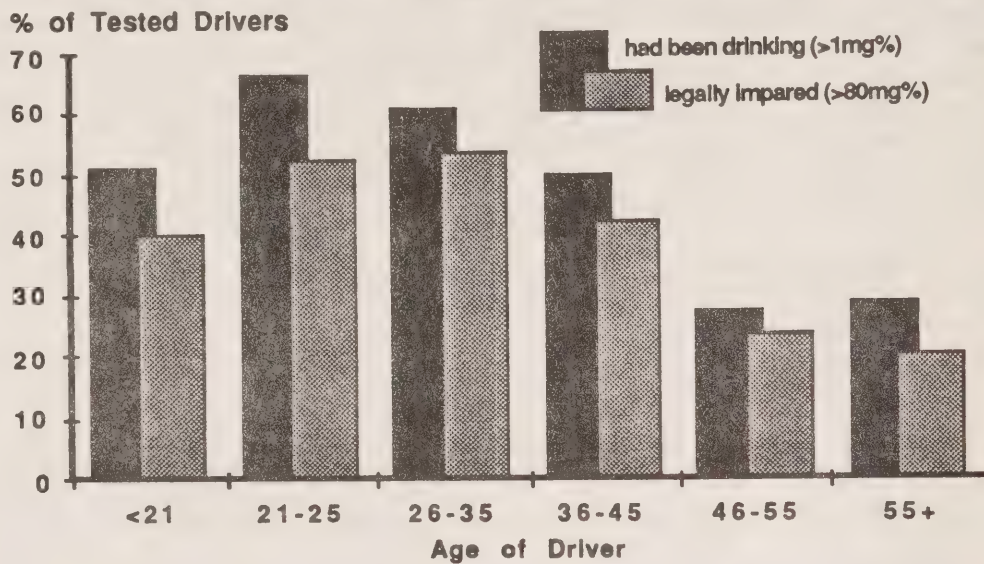


Figure 3

**Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type: 1985 (Eight Provinces)**

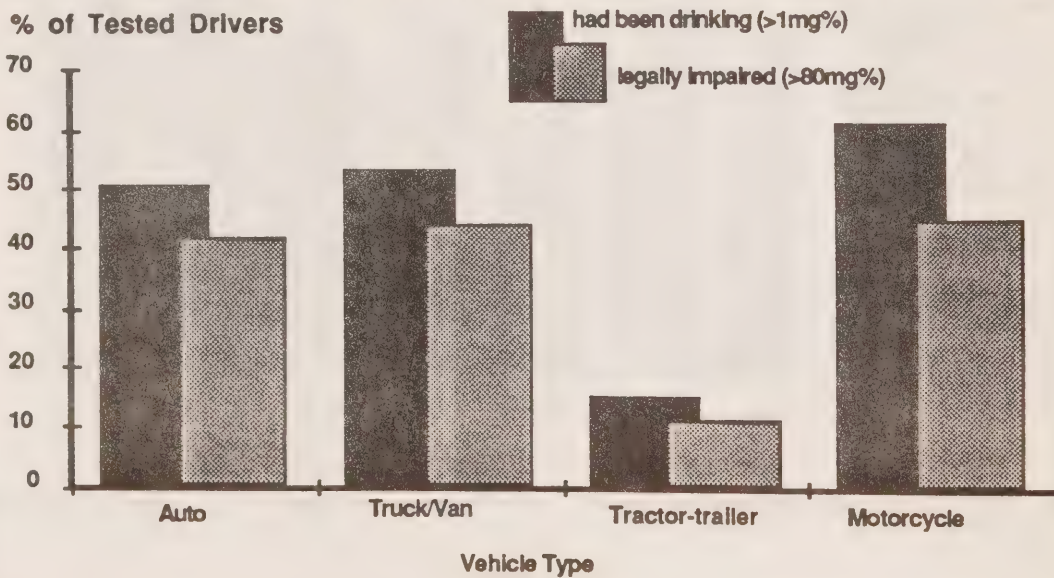


Figure 4

**Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers: (Seven Provinces)**

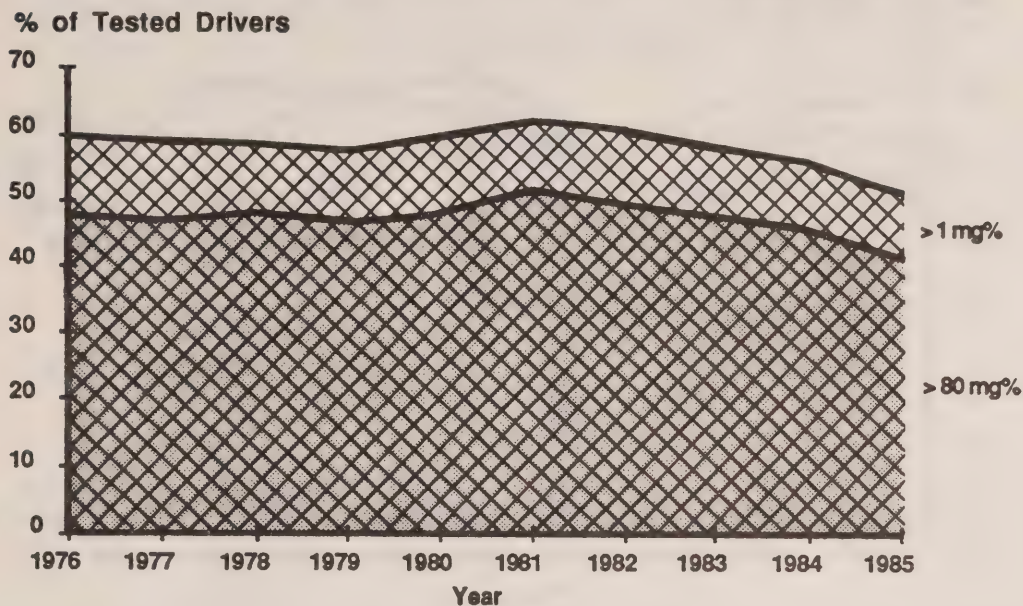


Figure 5

**Percent of Fatally Injured Drivers with Illegal BAC
by Sex: (Seven Provinces)**

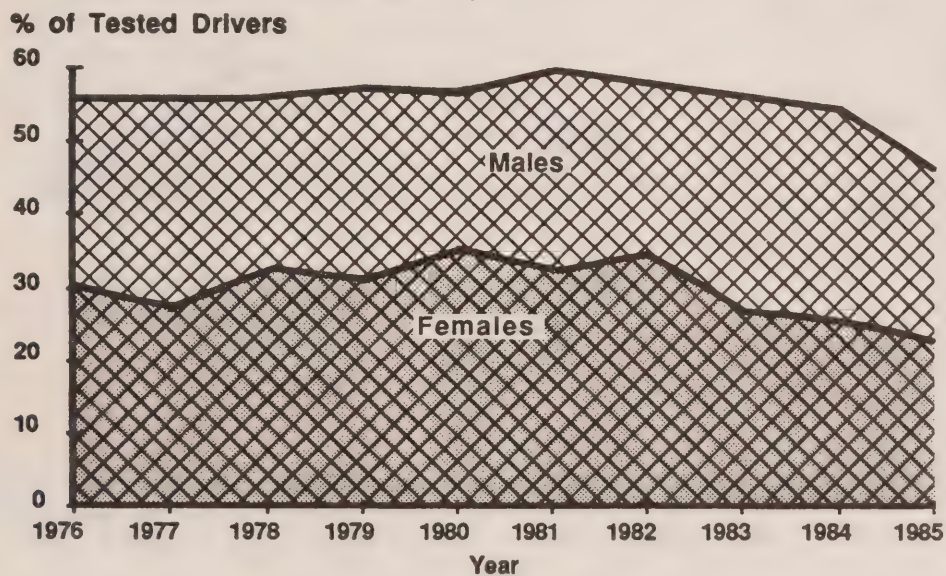


Figure 6

Percent of Fatally Injured Drivers with Illegal BAC
by Age Group: (Seven Provinces)

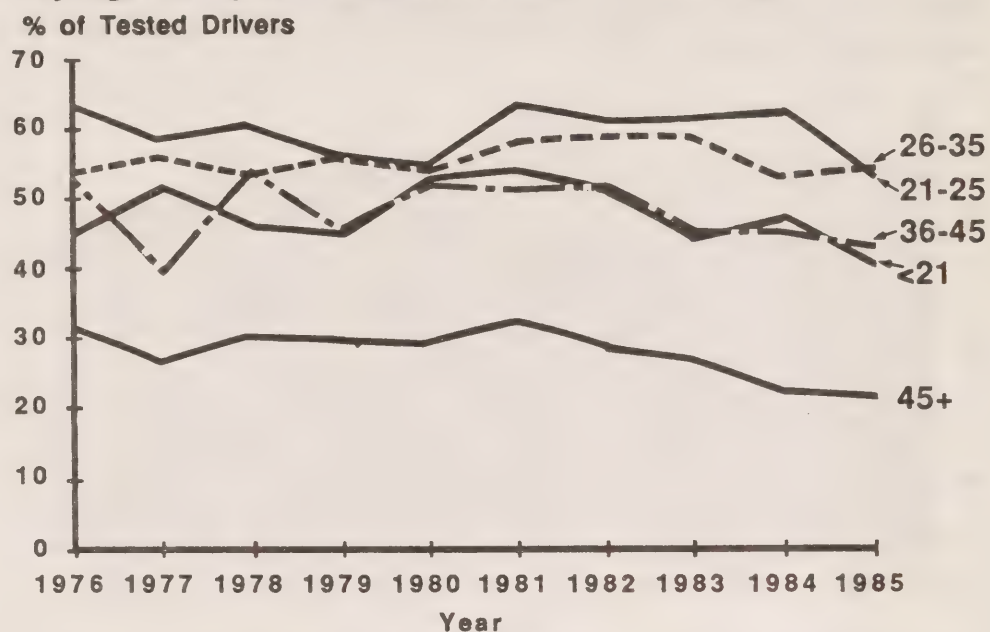
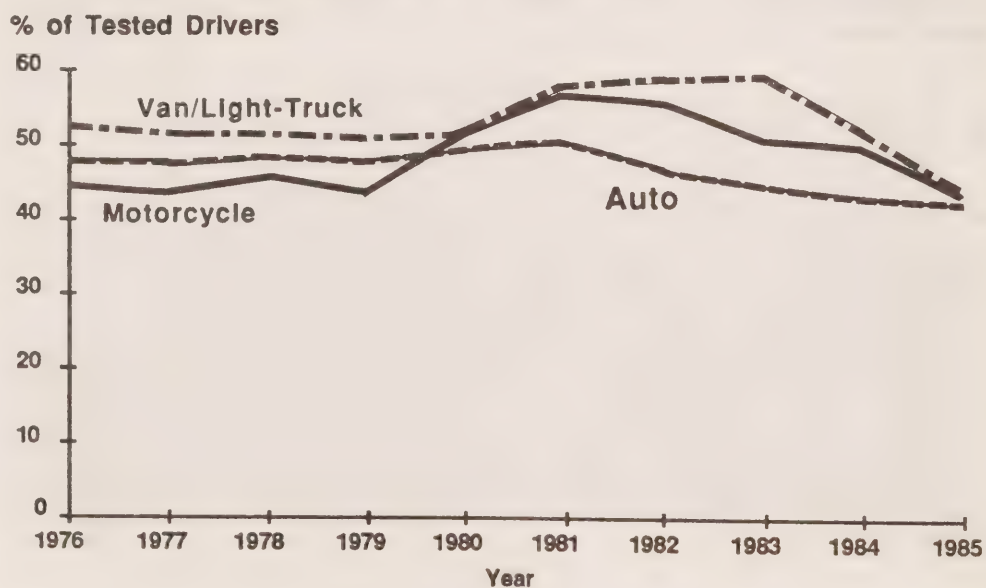


Figure 7

Percent of Fatally Injured Drivers with Illegal BAC
by Vehicle Type: (Seven Provinces)



APPENDIX

Corresponding Data for Figures 1-7*

TABLE 1

Distribution of BAC among fatally injured drivers by province: 1985

Percent of tested drivers:		
Province	>1 mg%	>80 mg%
British Columbia	51.6	41.9
Alberta	49.8	43.6
Saskatchewan	53.2	44.2
Manitoba	51.0	36.8
Ontario	51.5	40.2
New Brunswick	51.1	46.8
Nova Scotia	63.2	52.7
Prince Edward Island	58.3	50.0

TABLE 2

Distribution of BAC among fatally injured drivers by age: 1985

Percent of tested drivers:		
Age Group	>1 mg%	>80 mg%
< 21	51.6	40.1
21-25	66.8	52.6
26-35	61.1	54.1
36-45	50.3	42.3
46-55	27.4	23.8
55+	28.8	20.4

* e.g., Table 1 corresponds to data shown graphically in Figure 1.

TABLE 3

Distribution of BAC among fatally injured drivers by
vehicle type: 1985

Vehicle Type	Percent of tested drivers:	
	>1 mg%	>80 mg%
Automobile	50.4	42.2
Truck/van	53.4	43.9
Tractor-trailer	15.4	11.5
Motorcycle	61.2	44.7

TABLE 4

Distribution of BAC among fatally injured drivers:
1976-1985 (seven provinces)

Year	Percent of tested drivers:	
	>1 mg%	>80 mg%
1976	60.0	48.0
1977	58.8	46.9
1978	58.9	48.3
1979	57.7	46.9
1980	59.9	48.5
1981	62.2	52.1
1982	60.5	49.9
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7

TABLE 5

Percent of fatally injured drivers with illegal BAC by sex:
1976-1985 (seven provinces)

Sex	Year									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Male	56.4	56.4	56.3	57.7	56.6	59.9	58.4	56.5	54.5	46.2
Female	30.2	27.1	32.5	30.7	35.4	32.4	34.9	27.0	25.0	22.1

TABLE 6

Percent of fatally injured drivers with illegal BAC by age:
1976-1985 (seven provinces)

Age	Year									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
< 21	45.1	51.7	46.2	45.1	52.7	54.2	50.9	44.3	47.3	40.1
21-25	63.7	58.9	60.7	55.8	54.9	63.5	61.1	61.6	62.4	52.6
26-35	54.0	56.4	53.8	56.6	54.0	58.3	59.0	59.0	52.8	54.1
36-45	53.0	39.2	53.9	45.2	52.1	51.3	51.7	44.8	44.8	42.3
46+	31.7	26.6	30.6	29.9	29.2	32.4	28.6	26.8	22.1	21.4

TABLE 7

Percent of fatally injured drivers with illegal BAC by vehicle
type 1976-1985 (seven provinces)

Vehicle Type	Year									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Automobile	47.8	47.5	48.4	47.7	49.2	50.6	46.9	44.5	43.0	41.9
Van/truck	52.8	51.4	51.6	51.0	51.8	58.0	59.0	59.3	52.0	43.2
Motorcycle	44.4	43.5	46.0	43.7	51.6	57.3	55.5	50.8	49.4	43.1



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ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR
VEHICLE ACCIDENTS: 1986 AND THE PAST TEN YEARS

This leaflet provides information on blood alcohol concentration (BAC) determined for drivers fatally injured in motor vehicle accidents in Canadian provinces. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹ which consists of data collected from provincial coroners' or medical examiners' reports and reports prepared by investigating police officers. These data are supplied by provincial agencies.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). Fatality data for Nova Scotia were added starting from 1985 and for Newfoundland starting in 1986. Only Quebec and the Territories are unrepresented by the database. It is expected that data from Quebec will be available for the 1987 data year.

In reporting of the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

- 1) The percentages expressed are the percent of drivers tested for blood alcohol concentration. About 90% of the fatally injured drivers across the nine provinces were tested in 1986.

- 2) The data include only victims dying within 6 hours of the accident.

The data include only drivers of motorized road vehicles (excluded are snowmobile and farm vehicle operators as well as bicyclists, pedestrians and passengers).

¹ The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

- 4) BACs are reported in milligrams per 100 milliliters of blood, e.g., .08 = 80 mg% BAC. The percentage of drivers which had been drinking prior to the accident (BAC greater than 1 mg%) and the percentage which were legally impaired (BAC exceeding 80 mg%) are shown separately in the following figures. For clarity, Figures 5 to 7 show only the percent legally impaired.

Among the total of 1240 drivers tested from all provinces, 51.9% had been drinking and 44.6% were legally impaired. Figures 1 through 3 present data from nine provinces for 1986, the most recent year for which data are available. Figure 1 shows the percent of fatally injured drivers who had been drinking and the percent legally impaired for each province. Although there appears to be considerable variation between provinces, it should be emphasized that the percentages for smaller provinces are less reliable (i.e., more subject to chance variation) than are those for larger provinces. Figure 2 shows that among different age groups, the highest rates of alcohol involvement occur among 21-35 year olds and then steadily decline after age 35. Examination of BAC by vehicle type (Figure 3) reveals that motorcyclists and van/truck operators (excluding tractor-trailers) had higher rates of alcohol use and impairment than did automobile drivers. Alcohol use was lowest among tractor-trailer drivers, although the small number of fatalities in this category renders the obtained percentages unreliable.

Figures 4 through 7 present data for the ten year period, 1977 to 1986. To maintain consistency from year to year, only data from seven provinces have been aggregated (Nova Scotia and Newfoundland have been omitted because of their recency in joining the database). Figure 4 shows that the apparent downward trend from 1981 to 1985 was not continued in 1986. The percentage of drivers who had been drinking was about the same as in 1985 and the percentage of drivers legally impaired increased marginally from 41.7% to 43.6%. Figure 5 shows that over the 10 year period, female drivers killed are consistently less likely to be impaired by alcohol than are males and that the recent downward trend is not confined to males (who make up the vast majority of driver fatalities). Figure 6 shows that the overall downward trend is not exhibited equally by all age groups. Those age groups with the highest impairment rates (21-25 and 26-35) show little or no change over the ten years. In 1986, all but the oldest group (46+) had a higher percentage of drivers impaired than in 1985.

Figure 7 demonstrates that for automobile drivers, the declining trend in alcohol involvement in fatal accidents continues through to 1986. Only 39.5% of fatally injured automobile drivers were legally impaired in 1986, the lowest value ever recorded since the inception of the database in 1973. Considering that automobiles make up about 65% of the vehicles involved in fatal accidents, this finding is encouraging. In contrast, drivers of both motorcycles and vans/trucks exhibited marked increases in impairment levels from 1985 to 1986. These vehicle operators have traditionally shown higher impairment rates than automobile drivers, except for the year 1985. Tractor-trailers are not included in Figure 7 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Canada Building
Tower 2, 13th Floor
344 Slater Street
Ottawa, Ontario
K1A 0N5

Figure 1

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers by Province: 1986

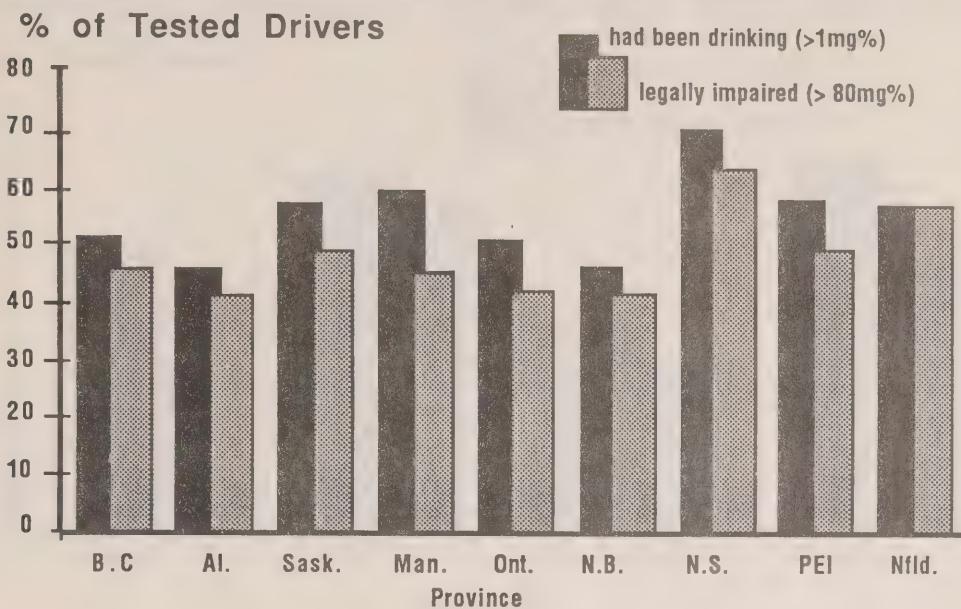


Figure 2

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers by Age: 1986 (Nine Provinces)

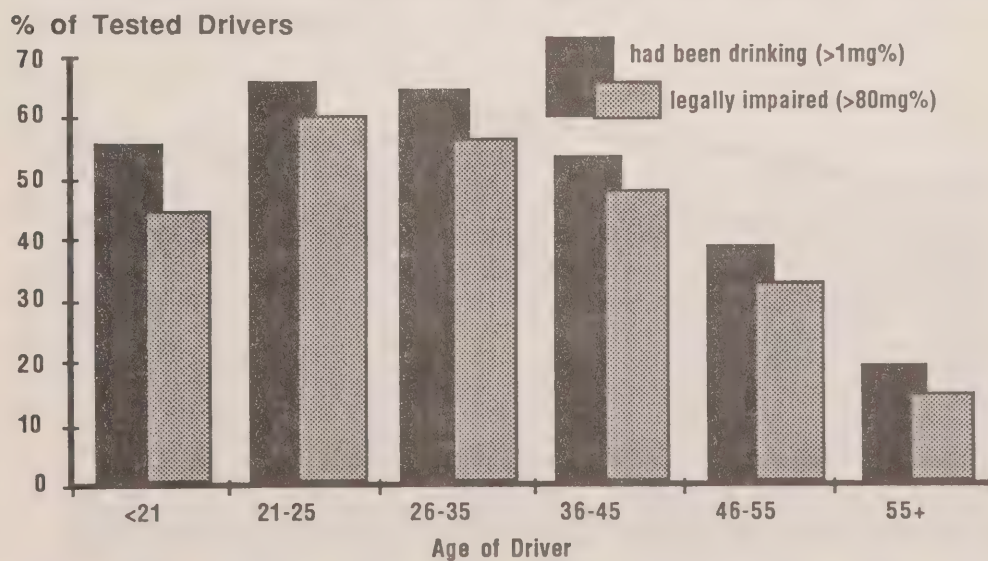


Figure 3

Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type: 1986 (Nine Provinces)

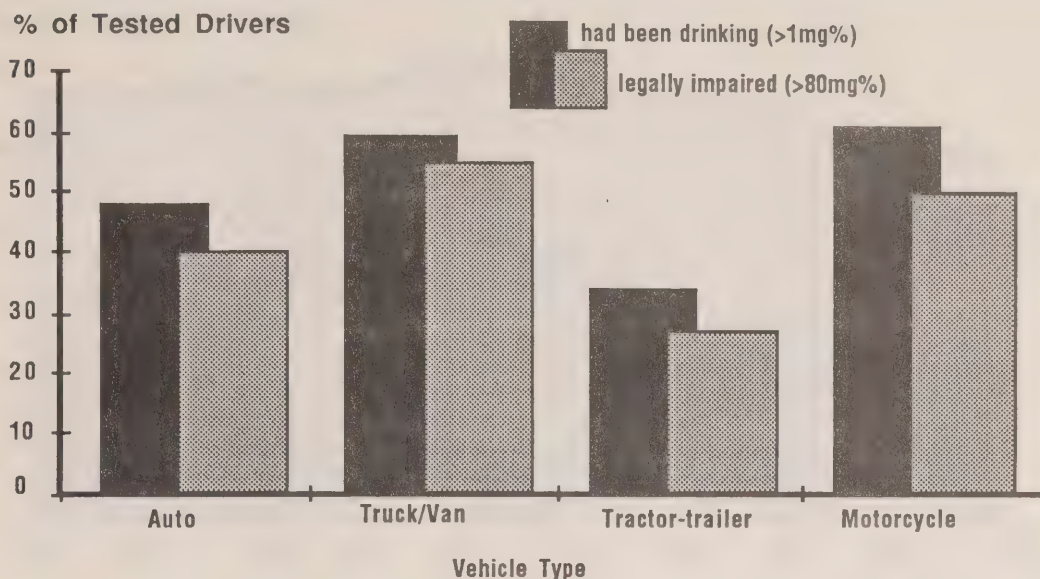


Figure 4

Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers: (Seven Provinces)

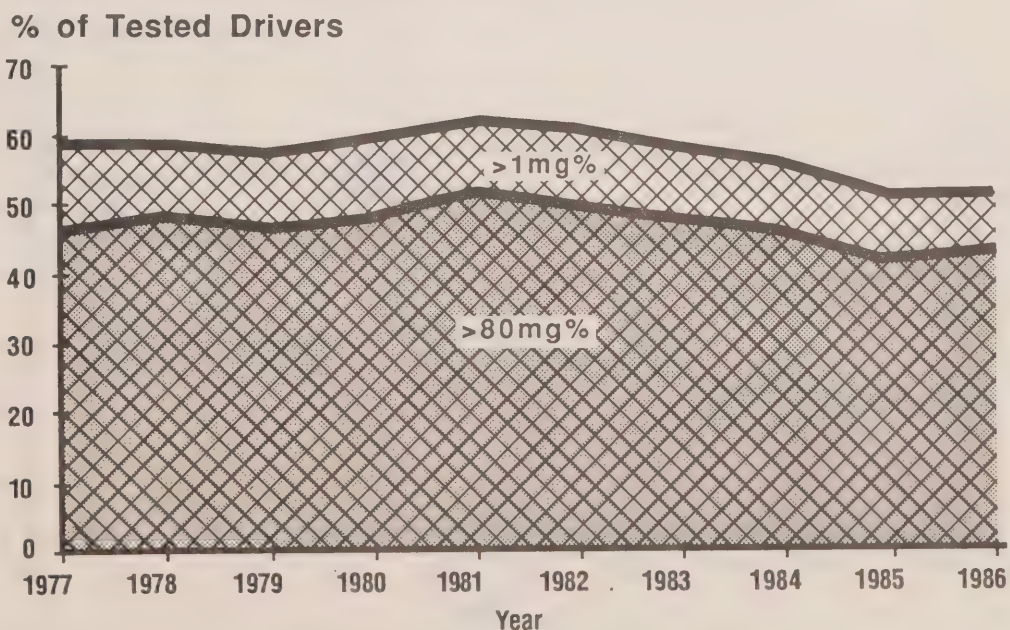


Figure 5

Percent of Fatally Injured Drivers with Illegal BAC by Sex: (Seven Provinces)

% of Tested Drivers

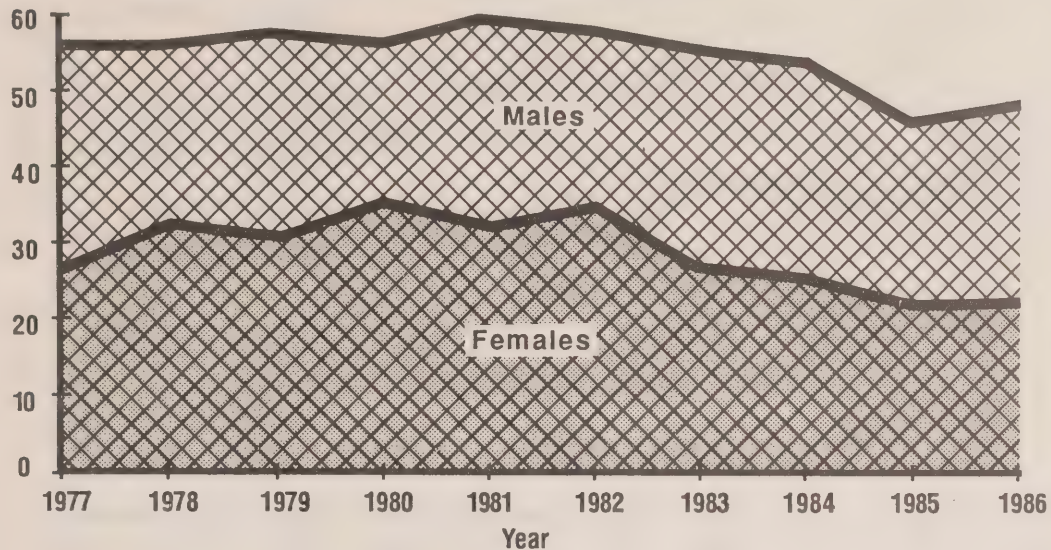


Figure 6

Percent of Fatally Injured Drivers with Illegal BAC by Age Group: (Seven Provinces)

% of Tested Drivers

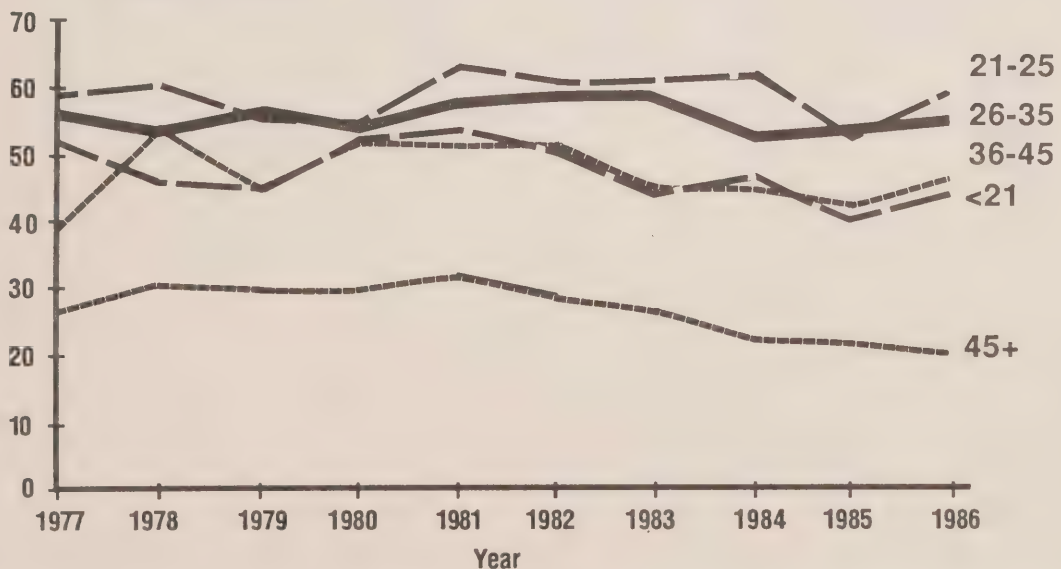
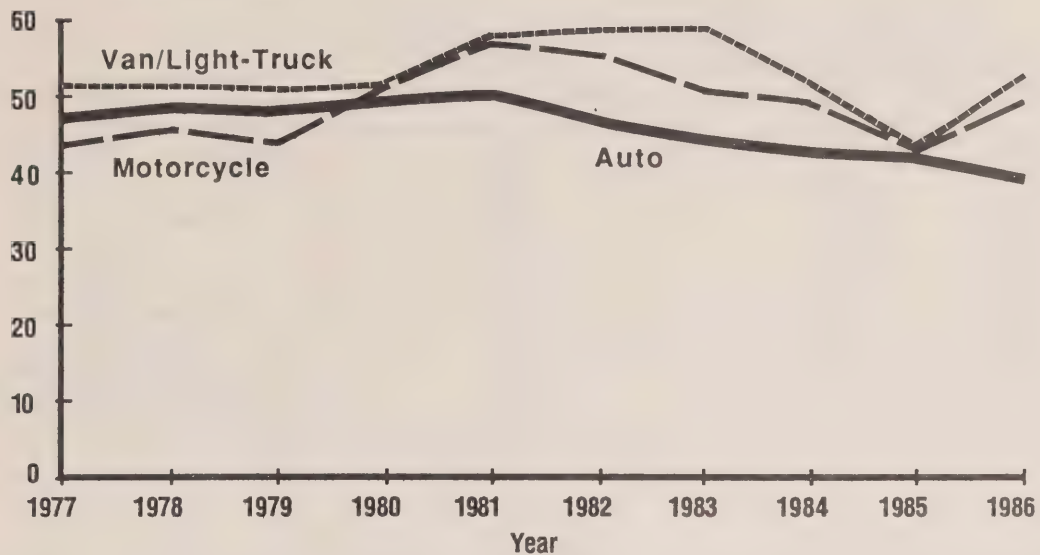


Figure 7

Percent of Fatally Injured Drivers with Illegal BAC by Vehicle Type: (Seven Provinces)

% of Tested Drivers



APPENDIX

Corresponding Data for Figures 1-7*

TABLE 1

Distribution of BAC among fatally injured drivers by province: 1986

Province	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
British Columbia	226	51.3	45.1
Alberta	218	45.9	41.3
Saskatchewan	101	57.4	49.5
Manitoba	57	59.7	45.6
Ontario	507	50.9	42.4
New Brunswick	43	46.5	41.9
Nova Scotia	55	70.9	63.6
Prince Edward Island	12	58.3	50.0
Newfoundland	21	57.1	57.1

TABLE 2

Distribution of BAC among fatally injured drivers by age:
1986 (nine provinces)

Age Group	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
< 21	273	55.7	44.7
21-25	185	66.0	60.0
26-35	309	64.7	56.6
36-45	173	53.8	48.0
46-55	107	38.3	32.7
55+	193	18.7	14.5

* e.g., Table 1 corresponds to data shown graphically in Figure 1.

TABLE 3

Distribution of BAC among fatally injured drivers by
vehicle type: 1986 (nine provinces)

Vehicle Type	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
Automobile	775	48.0	40.7
Truck/van	262	59.5	55.0
Tractor-trailer	29	34.5	27.6
Motorcycle	172	61.6	50.6

TABLE 4

Distribution of BAC among fatally injured drivers:
1977-1986 (seven provinces)

Year	Percent of tested drivers	
	>1 mg%	>80 mg%
1977	58.8	46.9
1978	58.9	48.3
1979	57.7	46.9
1980	59.9	48.5
1981	62.2	52.1
1982	60.5	49.9
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7
1986	51.0	43.6

TABLE 5

Percent of fatally injured drivers with illegal BAC by sex:
1977-1986 (seven provinces)

Sex	Year									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Male	56.4	56.3	57.7	56.6	59.9	58.4	56.5	54.5	46.2	48.5
Female	27.1	32.5	30.7	35.4	32.4	34.9	27.0	25.0	22.1	22.8

TABLE 6

Percent of fatally injured drivers with illegal BAC by age:
1977-1986 (seven provinces)

Age	Year									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
21	51.7	46.2	45.1	52.7	54.2	50.9	44.3	47.3	40.1	44.2
21-25	58.9	60.7	55.8	54.9	63.5	61.1	61.6	62.4	52.6	59.2
26-35	56.4	53.8	56.6	54.0	58.3	59.0	59.0	52.8	54.1	55.2
36-45	39.2	53.9	45.2	52.1	51.3	51.7	44.8	44.8	42.3	47.0
46+	26.6	30.6	29.9	29.2	32.4	28.6	26.8	22.1	21.4	20.0

TABLE 7

Percent of fatally injured drivers with illegal BAC by vehicle
type 1977-1986 (seven provinces)

Vehicle type	Year									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Automobile	47.5	48.4	47.7	49.2	50.6	46.9	44.5	43.0	41.9	39.5
Van/truck	51.4	51.6	51.0	51.8	58.0	59.0	59.3	52.0	43.2	53.1
Motorcycle	43.5	46.0	43.7	51.6	57.3	55.5	50.8	49.4	43.1	50.1



July 1987

1987 Preliminary Fatality Estimates

During the first three months of 1987, there were 662 fatalities in Canada, an increase of 0.8% over the same period in 1986, and a decrease of 1.1% compared to the average fatalities for this period in the last three years.

During the first quarter of 1987, motor vehicle driver, passenger and motorcyclist fatalities (at 316, 181 and 9) decreased by 2.7%, 5.7% and 3.8% respectively while pedestrian and bicyclist fatalities (at 129 and 7) increased by 22.9 and 40.0% respectively over fatalities among the same road user classes during the same period in 1986.

On the basis of the number of road fatalities during the first quarter this year, the projected traffic fatality total for Canada in 1987 is 4,152.

1987 Preliminary Fatality Statistics						% Change	
	Jan.	Feb.	Mar.	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Unfld.	2	2	4	8	53	14.3	-14.3
P.E.I.	1	1	1	3	26	N/A	-18.2
N.S.	16	7	6	29	167	31.8	14.5
N.B.	6	11	10	27	150	-10.0	5.2
Que.	57	34	48	139	904	-12.0	-25.9
Ont.	71	81	62	214	1419	25.9	24.2
Man.	3	4	9	16	137	0.0	-4.0
Sask.	11	9	14	34	182	-26.1	-19.7
Alta.	28	21	34	83	446	-27.2	-12.3
B.C.	46	34	27	107	651	17.6	21.6
Yuk.	0	0	0	0	8	N/A	N/A
N.W.T.	1	0	1	2	9	0.0	-33.3
Canada	242	204	216	662	4152	0.8	-1.1

1987 Fatalities by Road User Class

The following table presents preliminary fatality estimates by road user class for the first three months of 1987.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	126	73	38	0	0	5	242
Feb	88	57	47	3	2	7	204
Mar.	102	51	44	4	7	8	216
Total	316	181	129	7	9	20	662

*Includes passengers

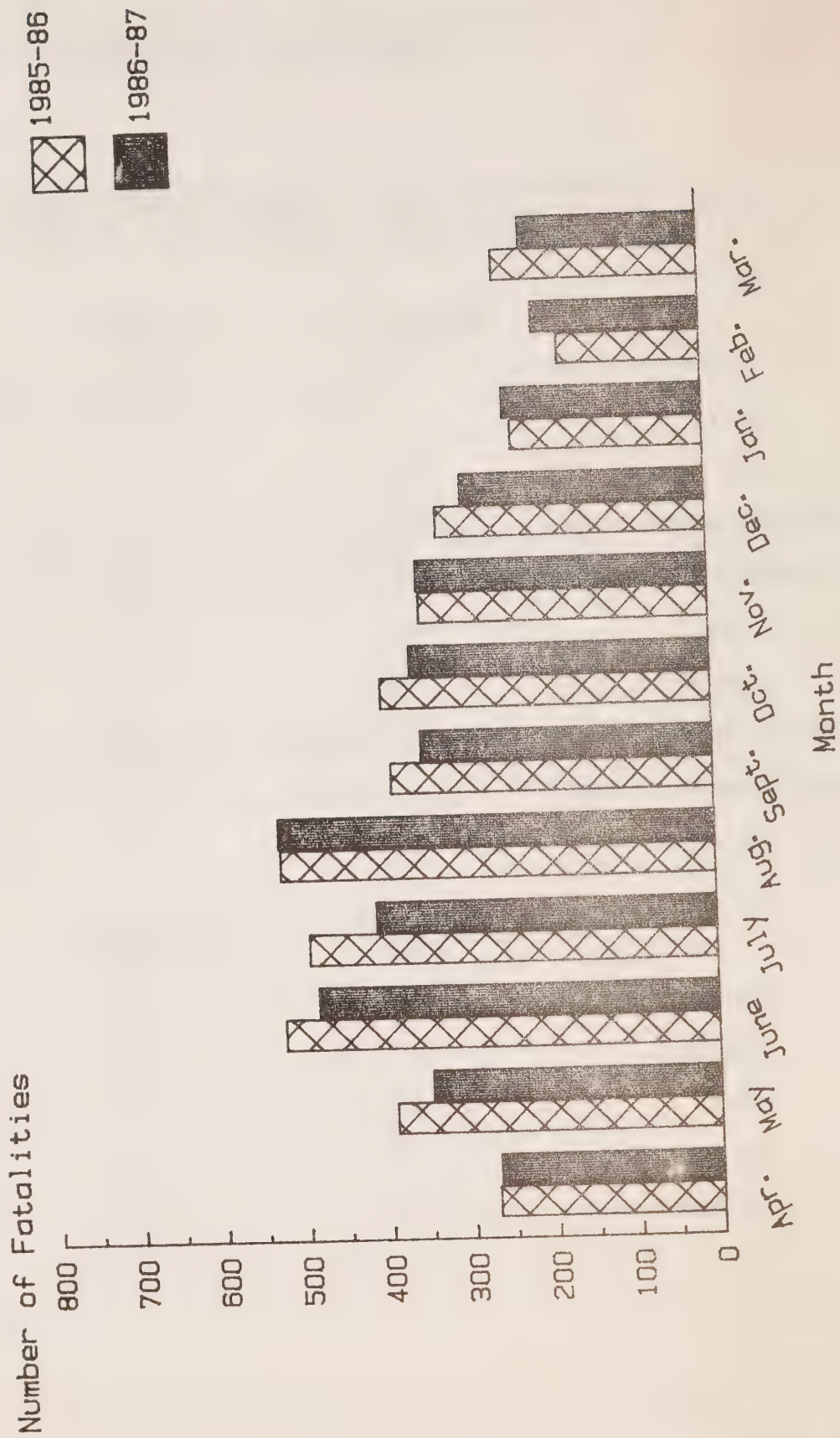
National Trend in Monthly Fatalities
April 1985 - March 1987

The following table and graph summarize fatalities for the last 12-month period (April 1986 - March 1987) and compare these data with statistics for the corresponding period of the previous year.

	<u>Fatalities</u> <u>1985</u>	<u>Fatalities</u> <u>1986</u>	<u>Percent</u> <u>Change</u>
April	272	270	-0.7
May	393	349	-11.2
June	525	484	-7.8
July	495	412	-16.8
August	526	529	0.6
September	390	353	-9.5
October	400	364	-9.0
November	352	353	0.3
December	326	296	-9.2

	<u>Fatalities</u> <u>1986</u>	<u>Fatalities</u> <u>1987</u>	<u>Percent</u> <u>Change</u>
January	233	242	3.9
February	174	204	17.2
March	250	216	-13.6
Jan-March Total	657	662	0.8
12 Month Total	4336	4072	-6.1

NATIONAL MOTOR VEHICLE TRAFFIC FATALITIES



LEAFLET

TP 2436

FEUILLET

October 1987

1987 Preliminary Fatality Statistics

During the first six months of 1987, there were 1,773 fatalities in Canada, an increase of 0.8% over the same period in 1986, and a decrease of 1.4% compared to the average fatalities for this period in the last three years.

During this period, motor vehicle driver, pedestrian and bicyclist fatalities (at 830, 256 and 48) increased by 3.8%, 5.3% and 6.7% respectively while motor vehicle passenger and motorcyclist fatalities (at 452 and 141) increased by 4.4% and 15.6% respectively over fatalities among the same road user classes during the same period in 1986.

On the basis of the number of road fatalities during the first six months of this year, the projected traffic fatality total for Canada in 1987 is 4130.

1987 Preliminary Fatality Statistics									% Change	
	Jan.	Feb.	Mar.	Apr.	May	June	Cumulative Total	Annual Projection	Last Year	Last 3 Years
d.	2	2	6	3	1	4	18	42	-21.7	-32.5
.I.	1	1	1	0	0	2	5	12	-50.0	-63.4
.	16	7	6	10	10	9	58	134	-3.3	-8.4
.	6	11	10	7	15	9	58	132	0.0	-7.9
.	57	34	48	74	116	129	458	1078	3.2	-11.7
.	71	81	62	65	110	127	516	1232	8.4	7.9
.	3	4	10	10	14	21	62	168	0.0	17.7
k.	11	10	14	15	24	23	97	221	-2.0	-2.7
a.	28	21	34	44	55	51	233	495	-11.1	-2.8
.	46	34	27	45	60	48	260	601	1.6	12.2
.	0	0	0	0	0	1	1	4	-50.0	-66.7
.T.	1	0	1	2	3	0	7	11	0.0	-16.0
ada	242	205	219	275	408	424	1773	4130	0.8	-1.4

1987 Fatalities by Road User Classes

The following table presents preliminary fatality estimates by road user classes for the first six months of 1987.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	126	73	38	0	0	5	242
Feb	88	58	47	3	2	7	205
Mar.	102	52	47	4	7	7	219
Apr.	122	67	41	9	30	6	275
May	200	95	36	14	49	14	408
June	192	107	47	18	53	7	424
Total	830	452	256	48	141	46	1773

*Includes passengers

National Trend in Monthly Fatalities
July 1985 - June 1987

The following table and graph summarize fatalities for the last 12-month period (July 1986 - June 1987) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities 1985 -----	Fatalities 1986 -----	Percent Change -----
July	495	413	-16.6
August	526	530	0.8
September	390	353	-9.5
October	400	368	-8.0
November	352	352	0.0
December	326	296	-9.2
	Fatalities 1986 -----	Fatalities 1987 -----	Percent Change -----
January	233	242	3.9
February	174	205	17.8
March	250	219	-12.4
April	270	275	1.9
May	349	408	16.9
June	483	424	-12.2
Jan-June Total	1759	1773	0.8
12 Month Total	4248	4085	-3.8

NATIONAL MOTOR VEHICLE TRAFFIC FATALITIES



LEAFLET

TP 2436

FEUILLET

ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE
ACCIDENTS: 1987 AND THE PAST TEN YEARSBACKGROUND:

This leaflet provides information on blood alcohol concentration (BAC) determined for drivers fatally injured in motor vehicle accidents in Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹ which consists of data collected from provincial coroners' or medical examiners' reports and reports prepared by investigating police officers. These data are supplied by provincial agencies.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). In 1985, Nova Scotia was added, and in 1986, Newfoundland joined the database. Finally in 1987, similar data from Quebec and the two territories became available, thus making the 1987 Fatality database representative of all the provinces and territories.

In reporting of the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

- 1) The percentages expressed are the percent of drivers tested for blood alcohol concentration. About 75% of the fatally injured drivers across Canada were tested in 1987. This figure is dramatically lower than the previous year where 90% of the fatally injured drivers were tested. The drop is primarily due to the inclusion of Quebec for the first time in 1987 where only 53% of drivers were tested.
 - 2) The 1987 data are based on victims dying within 12 months of the accident.
 - 3) The data include only drivers of motorized road vehicles (excluded are snowmobile and farm vehicle)
-
1. The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

operators as well as bicyclists, pedestrians and passengers).

- 4) BACs are reported in milligrams per 100 milliliters of blood, (e.g., .08 = 80 mg% BAC). The percentage of drivers which had been drinking prior to the accident (BAC greater than 1 mg%) and the percentage which were legally impaired (BAC exceeding 80 mg%) are shown separately in the following figures. For clarity, Figures 5 to 7 show only the percent legally impaired.

1987 CHARACTERISTICS:

Among the total of 1655 drivers tested, 53.1% had been drinking and 43.4% were legally impaired. Figures 1 through 3 present data from all of the provinces and the two territories for 1987, the most recent year for which data are available. Figure 1 shows the percent of fatally injured drivers who had been drinking and the percent legally impaired for each province. (For the Yukon and Northwest Territories, see Table 1 of the Appendix). Although there appears to be considerable variation between provinces, it should be emphasized that the percentages for smaller provinces are less reliable (i.e., more subject to chance variation) than are those for larger provinces. The percentages for Quebec should also be interpreted with caution. In view of the low rate of testing during this first year of data collection in Quebec, there is a distinct possibility of selection bias, i.e., drivers suspected of impairment may be more likely to have been tested. Figure 2 shows that among different age groups, the highest rates of impaired alcohol involvement occur among 26-35 year olds and then steadily decline after age 35. Of the 1655 drivers tested, 83.1% were male and 16.9% were female. Fifty-eight percent of the males had been drinking compared to 29.6% of the females. The corresponding rates of illegal impairment were 47.9% for males and 21.4% for females (figure not provided). Examination of BAC by vehicle type (Figure 3) reveals that motorcyclists and van/truck operators (excluding tractor-trailers) had higher rates of alcohol impairment than did automobile drivers. Alcohol use was lowest among tractor-trailer drivers, although the small number of fatalities in this category renders the obtained percentages unreliable.

TRENDS DURING THE PAST TEN YEARS:

Figures 4 through 7 present data for the ten year period, 1978 to 1987. To maintain consistency from year to year, only data from the original seven provinces have been aggregated (Nova Scotia, Newfoundland, Quebec and the two territories were omitted because of their recency in joining the database). In addition,

findings are based on victims whose death occurred within six hours after the accident, (a convention established in previous years).

Figure 4 shows that the apparent downward trend from 1981 to 1985 has stabilized. In 1987 the percentage of drivers who had been drinking was about the same as in the previous two years, as was the percentage of drivers legally impaired. Figure 5 shows that over the 10 year period, female drivers killed are consistently less likely to be impaired by alcohol than are males. The recent downward trend (from 1981) appears to be experienced about equally by both males and females. Figure 6 shows that the overall downward trend is not exhibited equally by all age groups. The 26-35 year age group shows little or no change over the ten years. Since 1981, the largest decreases were experienced by drivers under 25 years.

Figure 7 demonstrates that for automobile drivers, the declining trend in alcohol involvement in fatal accidents continues through to 1987. Only 39.1% of fatally injured automobile drivers were legally impaired in 1987, the lowest value ever recorded since the inception of the database in 1973. Considering that automobiles make up about 65% of the vehicles involved in fatal accidents, this finding is encouraging. In contrast, drivers of both van/trucks and motorcycles continue to exhibit markedly elevated impairment levels. Since 1980, drivers of these two types of vehicles have consistently shown higher impairment rates than automobile drivers. Tractor-trailers are not included in Figure 7 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Canada Building
Tower 2, 13th Floor
344 Slater Street
Ottawa, Ontario
K1A 0N5

Figure 1

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers by Province: 1987

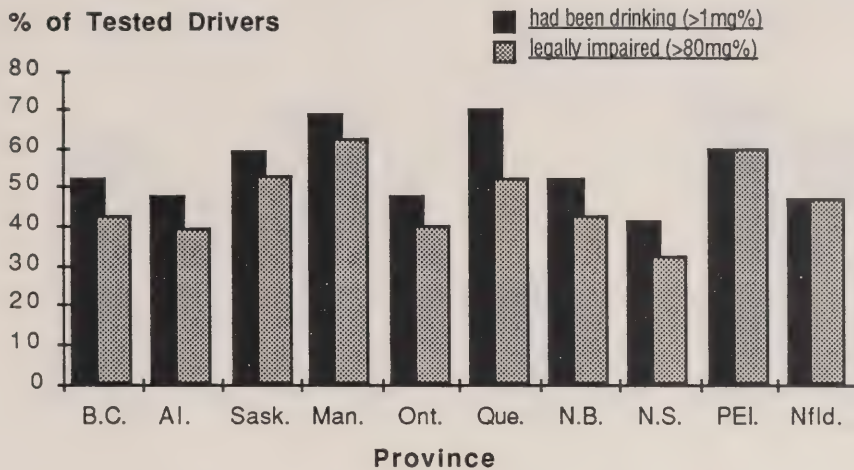


Figure 2

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers by Age: 1987 (Canada)

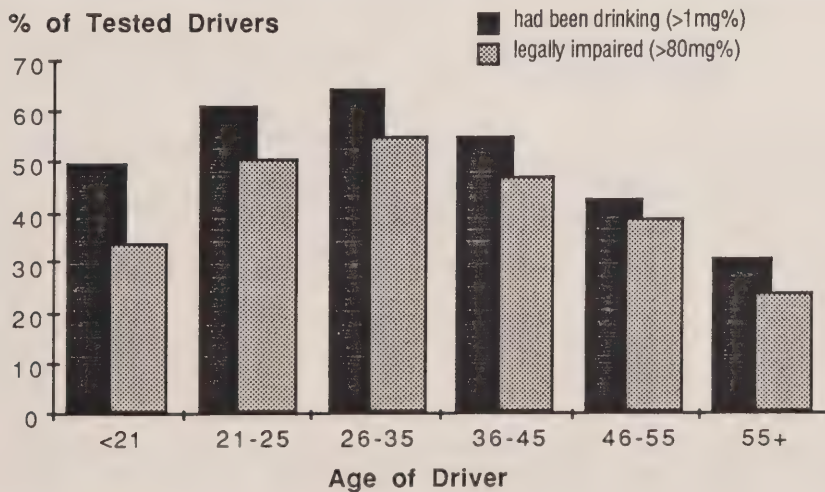


Figure 3

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers by Vehicle Type: 1987 (Canada)

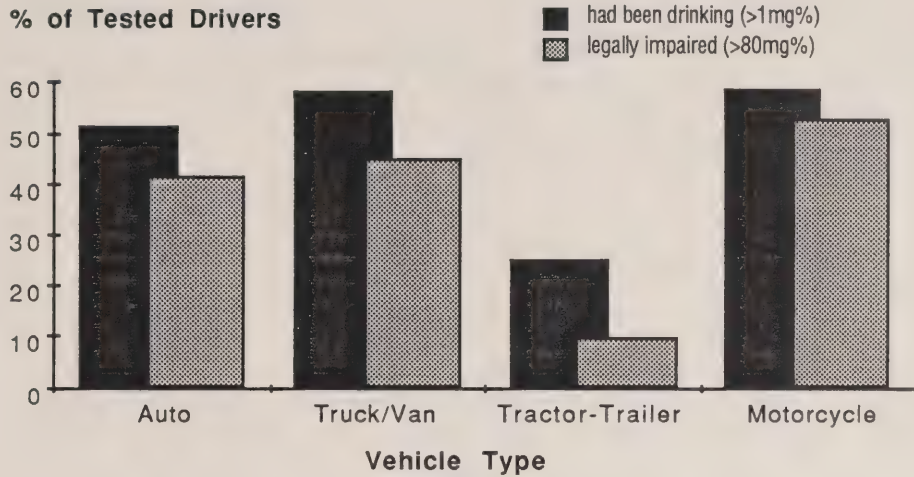


Figure 4

Distribution of Blood Alcohol Concentration Among Fatally Injured Drivers: (Seven Provinces)

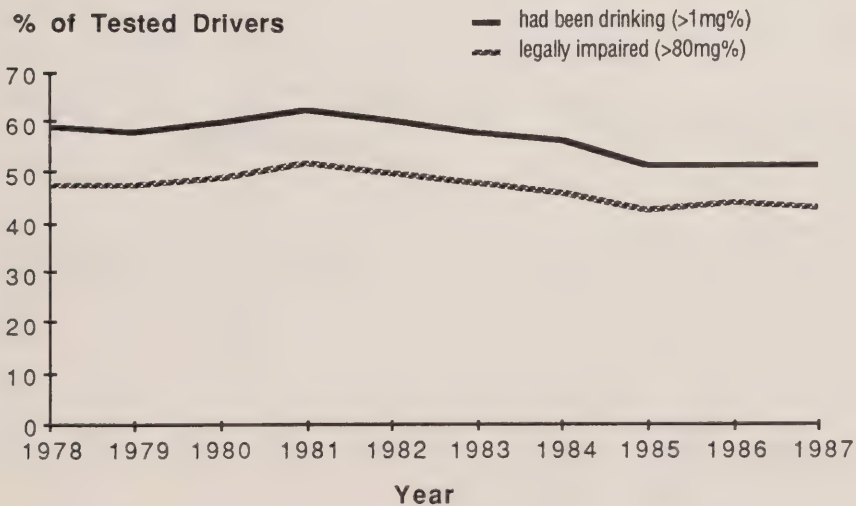


Figure 5

Percent of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Sex: (Seven Provinces)

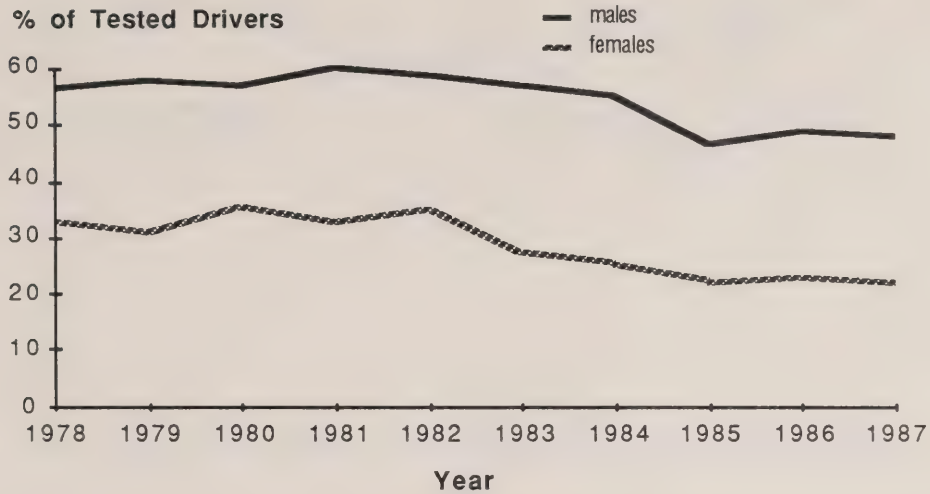


Figure 6

Percent of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Age Group: (Seven Provinces)

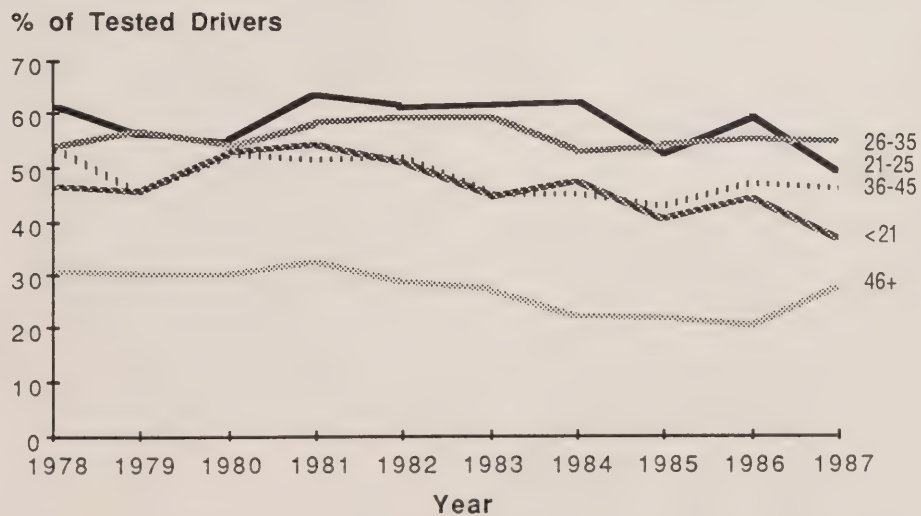
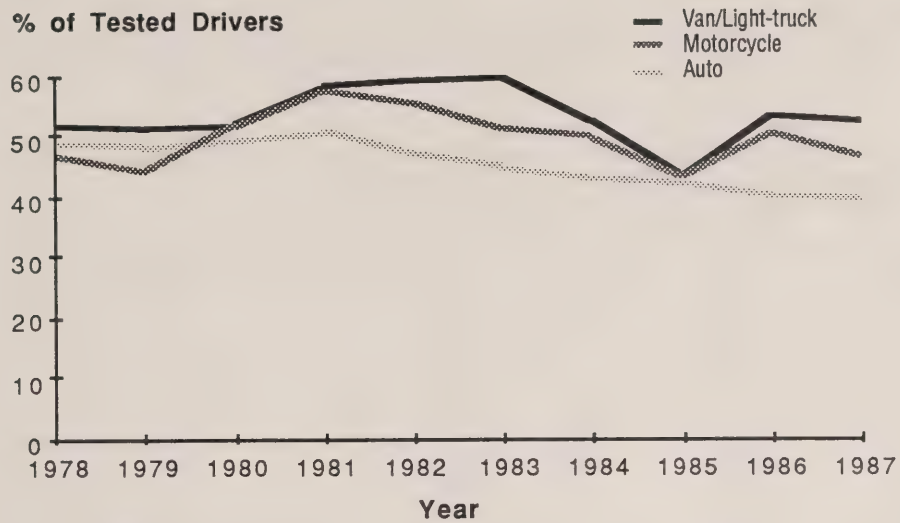


Figure 7

Percent of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Vehicle Type: (Seven Provinces)



APPENDIX

Corresponding Data for Figures 1-7*

TABLE 1

Distribution of BAC among fatally injured drivers by
province/territory: 1987

Province	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
British Columbia	285	51.6	42.2
Alberta	252	47.2	39.3
Saskatchewan	86	59.3	52.3
Manitoba	61	68.9	62.3
Ontario	552	47.3	39.9
Quebec	265	70.2	51.7
New Brunswick	64	51.6	42.2
Nova Scotia	63	41.3	31.8
Prince Edward Island	5	60.0	60.0
Newfoundland	15	46.7	46.7
Yukon	6	66.6	33.3
Northwest Territories	1	0.0	0.0
TOTAL	1655	53.1	43.4

TABLE 2

Distribution of BAC among fatally injured drivers by age:
1987 (Canada)

Age Group	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
< 21	300	49.7	34.0
21-25	344	61.1	50.6
26-35	414	64.5	55.1
36-45	224	55.4	47.3
46-55	126	42.9	38.9
56+	247	30.4	23.9

* e.g., Table 1 corresponds to data shown graphically in
Figure 1.

TABLE 3

Distribution of BAC among fatally injured drivers by
vehicle type: 1987 (Canada)

Vehicle Type	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
Automobile	1044	51.1	41.3
Truck/van	314	58.3	52.5
Tractor-trailer	32	25.1	9.4
Motorcycle	265	58.5	44.9

TABLE 4

Distribution of BAC among fatally injured drivers:
1978-1987 (seven provinces; death within 6 hours)

Year	Percent of tested drivers	
	> 1 mg%	> 80 mg%
1978	58.9	48.3
1979	57.7	46.9
1980	59.9	48.5
1981	62.2	52.1
1982	60.5	49.9
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7
1986	51.0	43.6
1987	50.8	42.5

TABLE 5

Percent of fatally injured drivers with illegal BAC by sex:
1978-1987 (seven provinces; death within 6 hours)

Sex	Year									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Male	56.3	57.7	56.6	59.9	58.4	56.5	54.5	46.2	48.5	47.4
Female	32.5	30.7	35.4	32.4	34.9	27.0	25.0	22.1	22.8	21.9

TABLE 6

Percent of fatally injured drivers with illegal BAC by age:
1978-1987 (seven provinces; death within 6 hours)

Age	Year									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
< 21	46.2	45.1	52.7	54.2	50.9	44.3	47.3	40.1	44.2	36.2
21-25	60.7	55.8	54.9	63.5	61.1	61.6	62.4	52.6	59.2	48.8
26-35	53.8	56.6	54.0	58.3	59.0	59.0	52.8	54.1	55.2	54.3
36-45	53.9	45.2	52.1	51.3	51.7	44.8	44.8	42.3	47.0	45.8
46+	30.6	29.9	29.2	32.4	28.6	26.8	22.1	21.4	20.0	27.5

TABLE 7

Percent of fatally injured drivers with illegal BAC by vehicle
type 1978-1987 (seven provinces; death within 6 hours)

Vehicle Type	Year									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Automobile	48.4	47.7	49.2	50.6	46.9	44.5	43.0	41.9	39.5	39.1
Van/truck	51.6	51.0	51.8	58.0	59.0	59.3	52.0	43.2	53.1	52.1
Motorcycle	46.0	43.7	51.6	57.3	55.5	50.8	49.4	43.1	50.1	46.5

LEAFLET

TP 2436

FEUILLET

Child Restraint Use in Canada: 1987 Survey Data

The 1987 survey of child restraint use was conducted over a seven day period (Oct. 26 to Nov. 1) in conjunction with the National Seat Belt Use Survey. Observers recorded data at 130 sites across Canada. Data collection occurred between the hours of 7 a.m. and 5 p.m., Monday to Saturday and between 1 p.m. and 5 p.m. on Sunday. Four two-hour time periods were selected for data collection at each site. Only vehicles stopped for red lights were included in the survey.

The survey results presented in Table 1 give the percentages of children who were seated in restraint systems appropriate to their ages. The appropriate restraint system for each age group was defined as follows: under 1 year of age - infant carrier or child seat; 1 to 4 years - child seat, booster seat, seat belt; 5 to 9 years - booster seat or seat belts; 10 to 15 years - seat belt. As shown in Table 1, 67.5% of the children observed were in occupant restraint systems appropriate to their ages. The under 1 year group had the highest percentage of appropriate restraint use (85.6%), while the 5 to 9 year group had the lowest appropriate use (60.2%).

The proper use of infant carriers, child seats and booster seats was determined for children under 5 years of age as follows: infant carrier with seat belt and shoulder harness fastened; child seat with seat belt, shoulder harness and tether strap fastened; booster seat with seat belt fastened. The proper use of child restraints was determined to be 62.1% for those children under age 5 who were seated in child restraints appropriate to their ages.

Table 3 shows that 54% of the children observed were properly secured in child restraint systems appropriate to their ages. Overall proper use for children under 5 years of age has doubled from 21.7% in 1985 to 44.9% in 1987.

A comparison of the 1987 survey results with the results of the previous (1985) survey indicates that the use of appropriate restraints has increased 21.8% (from 45.7% to 67.5%) for children under 16 years and 26.9% (from 45.4% to 72.3%) for children under 5 years. Proper use of child restraints has increased 14.3% (from 47.8% to 62.1%) for children under 5 years of age. The 1987 overall proper use of child restraints for

children under 16 years was higher than the 1985 result by 19.9% (34.1% to 54.0%). For children under 5 years of age, overall proper use showed an improvement of 23.2% (from 21.7% to 44.9%) over the two year period between the surveys.

For further information about the survey, write to:

Road Users Division
Road Safety Directorate
Transport Canada
344 Slater Street
Ottawa
K1A 0N5

Table 1

Appropriate Restraint Use by Province and Age
in Percent from 1987 Survey

	Province										
Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.	Canada
Under 1 year	88.3	92.4	77.2	80.0	90.1	73.3	86.3	80.5	84.9	72.2	85.6
1 to 4 years	74.0	77.2	65.7	62.5	71.9	52.2	69.0	80.4	80.9	61.8	68.6
Total under 5 years	76.8	81.1	68.3	64.8	75.7	56.5	73.1	80.4	81.8	64.5	72.3
5 to 9 years	71.1	74.9	65.0	50.6	63.7	36.5	75.0	79.3	87.5	52.3	60.2
10 to 15 years	77.4	86.2	71.6	59.1	64.6	52.9	76.1	76.2	70.6	77.2	67.8
16 years	75.1	80.2	67.9	59.4	69.4	48.7	74.2	79.3	81.9	62.7	67.5
Number of cases	1284	2122	910	554	2228	1837	363	753	750	716	11517

1. Percents for Canada are weighted by provincial populations.

Table 2

Proper Use of Child Restraints by Province
in Percent from 1987 Survey^a

	Province										
Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I	Nfld.	Canada
Under 1 year	58.9	40.9	63.2	59.1	55.8	54.7	81.2	49.5	68.5	71.9	54.2 ^b
1 to 4 years	71.5	61.3	75.3	62.6	62.6	63.5	70.8	66.8	72.0	77.1	64.8
Total under 5 years	68.6	55.3	72.2	62.0	60.9	61.2	73.7	62.7	71.2	75.6	62.1
Number of cases	420	945	308	168	732	459	135	256	299	191	3913 ^c

a. Includes only cases where the appropriate child restraint was used.

b. Percents for Canada are weighted by provincial populations.

c. Children 5 and over are not included because proper use of seat belts was not measured.

Table 3

Overall Proper Use of Child Restraints by Province
and Age in Percent from 1987 Survey

	Province										
Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.	Canada
Under 1 year	52.0	37.8	48.8	47.3	50.3	40.1	70.0	39.8	58.2	51.9	46.4 ^a
1 to 4 years	52.9	47.3	49.5	39.1	45.0	33.1	48.8	53.7	58.2	47.6	44.4
Total under 5 years	52.7	44.9	49.3	40.2	46.1	34.5	53.8	50.4	58.2	48.7	44.9
5 to 9 years	70.9	74.4	64.4	50.2	63.4	36.5	75.0	78.8	87.5	52.3	59.9
10 to 15 years	77.4	86.2	71.6	59.1	64.6	52.9	76.1	76.2	70.6	77.2	67.8
All ages	63.9	58.8	57.3	46.3	55.7	38.3	63.7	65.4	70.2	55.6	54.0
Number of cases	1284	2122	910	554	2228	1837	363	753	750	716	11517

^a. Percents for Canada are weighted by provincial populations.



Transport
Canada

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Road Safety

Sécurité routière

LEAFLET

TP 2436

FEUILLET

January 1988

1987 Preliminary Fatality Statistics

During the first nine months of 1987, there were 3,092 road fatalities in Canada, an increase of 1.2% over the same period in 1986, and a decrease of 1.7% compared to the average fatalities for this period in the last three years.

During this period, motor vehicle driver, pedestrian and bicyclist fatalities (at 1,408, 397 and 99) increased by 2.3%, 4.2% and 15.1% respectively while motor vehicle passenger and motorcyclist fatalities (at 801 and 315) increased by 3.3% and 4.5% respectively over fatalities among the same road user classes during the same period in 1986.

On the basis of the number of road fatalities during the first nine months of this year, the projected traffic fatality total for Canada in 1987 is 4,114.

1987 Preliminary Fatality Statistics										% Change			
	J.	F.	M.	A.	M.	J.	J.	A.	S.	Cumulative Total	Annual Projection	Last Year	Last 3 Years
d.	2	2	6	3	1	4	8	4	7	37	46	-21.3	-25.5
I.	1	1	1	0	0	2	2	6	0	13	17	-23.5	-46.6
s.	16	7	6	10	10	9	26	17	15	116	159	10.6	8.8
s.	6	11	10	7	15	9	18	11	10	97	123	-4.9	-13.9
e.	57	34	48	74	116	124	126	111	98	788	1062	0.4	-13.0
t.	71	81	62	65	110	127	144	137	105	902	1219	10.1	6.7
n.	3	4	10	10	15	22	11	22	18	115	145	-7.3	1.8
sk.	10	10	15	15	24	25	21	27	21	168	213	-10.2	-6.1
a.	28	21	33	45	55	52	48	55	43	380	492	-9.3	-3.3
c.	46	34	27	45	61	48	58	77	62	458	615	5.8	14.8
at.	0	0	0	0	0	2	3	4	1	10	15	11.1	25.0
V.T.	1	0	1	2	3	0	1	0	0	8	8	-20.0	-38.5
Canada	241	205	219	276	410	424	466	471	380	3092	4114	1.2	-1.7

Ce feuillet est aussi disponible dans la deuxième langue officielle.

This leaflet is also available in the other official language.

1987 Fatalities by Road User Class

The following table presents preliminary fatality estimates by road user class for the first nine months of 1987.

	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
h	125	73	38	0	0	5	241
c	88	58	47	3	2	7	205
r	100	53	48	4	7	7	219
r	122	67	41	9	30	7	276
y	201	92	36	14	50	17	410
d	191	105	48	18	54	8	424
l	205	131	43	22	60	5	466
g	205	130	44	17	64	11	471
g.	171	92	52	12	48	5	380
tl	1408	801	397	99	315	72	3092

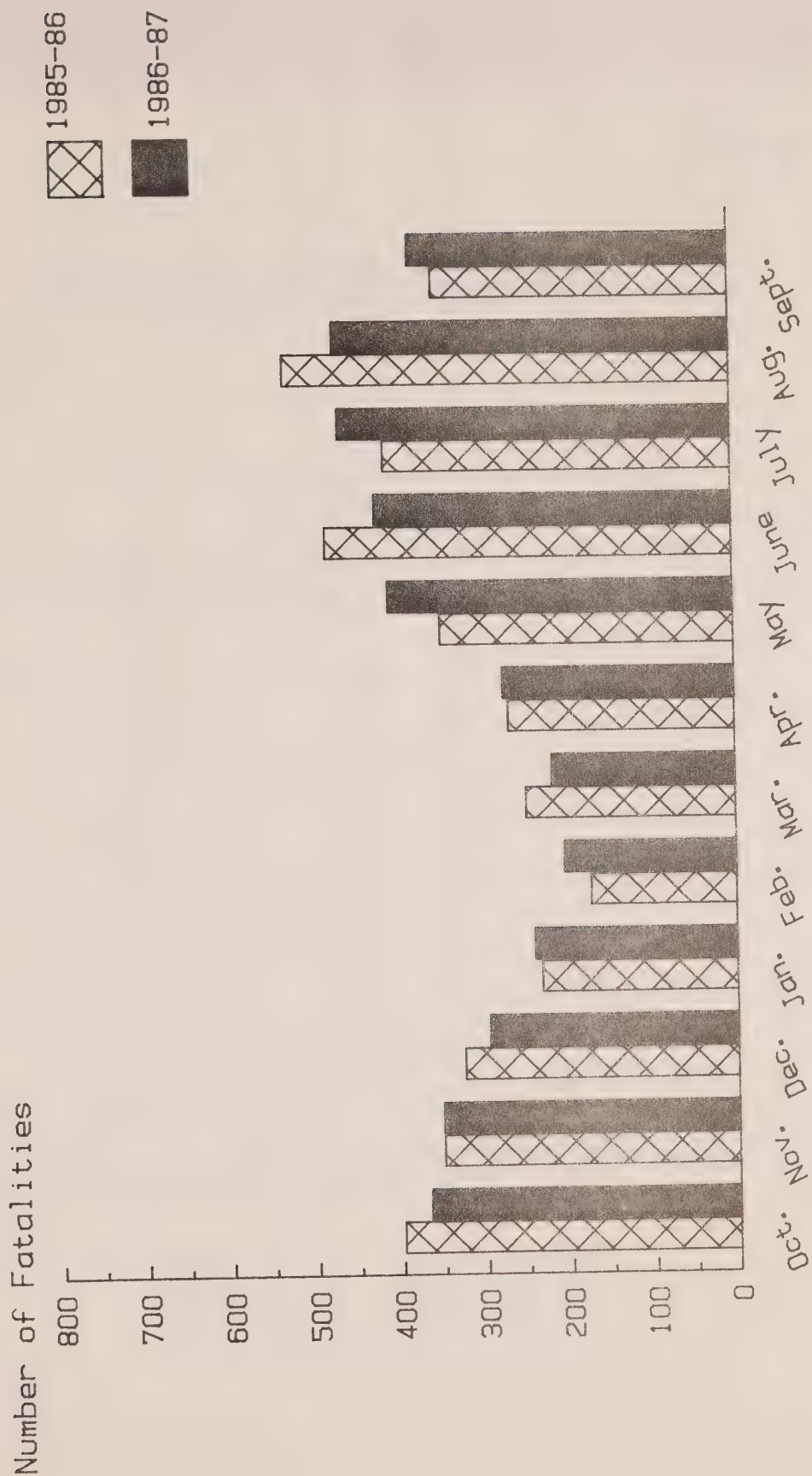
cludes passengers

National Trend in Monthly Fatalities
October 1985 - September 1987

The following table and graph summarize fatalities for the last 12 month period (October 1986 - September 1987) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities 1985 -----	Fatalities 1986 -----	Percent Change -----
October	400	368	-8.0
November	352	352	0.0
December	326	296	-9.2
	Fatalities 1986 -----	Fatalities 1987 -----	Percent Change -----
January	233	241	3.4
February	174	205	17.8
March	250	219	-12.4
April	270	276	2.2
May	349	410	17.5
June	483	424	-12.2
July	413	466	12.8
August	530	471	-11.1
September	353	380	7.6
Jan-Sept Total	3055	3092	1.2
12 Month Total	4133	4108	-0.6

NATIONAL MOTOR VEHICLE TRAFFIC FATALITIES





Transport
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Road Safety

Sécurité routière

LEAFLET

TP 2436

FEUILLET

January 1988

Estimates of Shoulder Seat Belt Use
From Annual Surveys 1980 - 1987

Table 1

% of Car Drivers Wearing Shoulder Belts,
Where Available*

Province	1980	1981	1982	1983	1984	1985	1986	1987
Newfoundland	2.8	8.6	67.8	75.9	69.7	65.5	61.4	64.6
Prince Edward Island	6.2	3.4	7.2	5.6	9.3	17.9	13.7	50.0
Nova Scotia	9.3	11.4	8.7	12.1	20.2	80.8	79.8	68.6
New Brunswick	5.6	8.1	4.2	66.5	60.2	63.4	66.5	65.0
Quebec	39.0	40.7	67.5	60.4	54.3	53.4	67.7	85.8
Ontario	43.7	52.5	48.9	60.1	61.9	66.4	65.9	67.6
Manitoba	6.0	6.4	7.0	11.1	61.6	53.6	61.3	64.6
Saskatchewan	60.7	50.5	48.4	54.0	49.6	51.1	59.7	71.9
Alberta	12.7	11.0	17.1	18.2	19.8	24.4	27.8	74.3
British Columbia	49.3	42.4	53.0	67.4	72.7	73.8	78.3	80.4
Canada	36.4	38.1	45.6	52.0	54.9	58.4	63.2	74.0

*Shoulder-belt fitting: 1980 = 95.0% 1984 = 98.0%
 1981 = 97.4% 1985 = 97.9%
 1982 = 96.8% 1986 = 98.7%
 1983 = 96.8% 1987 = 98.7%

TABLE 2

Estimates of Shoulder Seat Belt Use
by Road Types in 1987

	<u>Urban</u>	<u>Rural</u>	<u>Total</u>
Province	1987	1987	1987
Newfoundland	64.6	72.9	65.0
Prince Edward Island	50.0	40.4	49.1
Nova Scotia	68.6	92.8	70.8
New Brunswick	65.0	77.9	69.1
Quebec	85.8	85.4	85.8
Ontario	67.6	74.6	67.8
Manitoba	64.6	76.6	64.9
Saskatchewan	71.9	67.9	71.8
Alberta	74.3	65.6	73.9
British Columbia	80.4	74.1	80.1
Canada	74.0	76.3	74.1

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 26 to November 1, 1987.

Results

For Canada as a whole, the estimated proportion of drivers using the available shoulder belts was 74%. This is by far the highest national use rate ever observed, 11 percentage points higher than the rate estimated for 1986, and double that of 1980.

Highlights of the results by province were as follows (in rounded percentages):

- Quebec's rate was 86%, the highest use rate ever achieved by a province in this series of national surveys, an increase of 18 percentage points over the previous year and of more than 30 percentage points over 1985;
- Alberta's government passed legislation requiring mandatory belt use effective July 1, 1987, and saw belt use reach 74% in the survey period, compared to 28% a year earlier;
- Prince Edward Island's government also passed mandatory belt use legislation, officially effective July 1, 1987, but with an announced date of December 1 for the beginning of enforcement; by the time of the survey, use had risen to 50% from 14% a year earlier;
- British Columbia saw belt use top 80% for the first time in these surveys, continuing an impressive increase since 1981;
- a rate of 72% was reached in Saskatchewan, up 12 percentage points from 1986, and 20 percentage points from 1985;
- minor increases were also observed in Newfoundland, Ontario and Manitoba compared to the previous year's survey;
- belt use declined substantially in Nova Scotia, to 69% from 80% in 1986; and
- New Brunswick's rate remained effectively unchanged, at 65%.

Of the 11 percentage point increase in the use rate at the national level between the 1986 and 1987 surveys, over 5 percentage points were contributed by the rise in Alberta and 4 percentage points by the rise in Quebec.

Survey Method

The survey was undertaken by observers at 178 urban sites selected by province, road type and community size. The sample is comparable to the samples used in the previous belt use surveys (Table 1). In addition to these 178 sites, the survey was also undertaken at 22 rural sites (on highways or county roads), and the results from these sites are summarised separately in Table 2. A weighted combined estimate based on all 200 sites is also presented, for which the traffic counts on urban and rural sites are used as weights.

The observation techniques in the survey were identical to those of the 1981 to 1986 surveys, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, driver's sex and age group.

For further information write to:

Evaluation and Data Systems,
Traffic Safety Standards and Research,
Transport Canada,
Tower A, Place de Ville,
Floor 16,
Ottawa, Ontario.
K1A 0N5



Transport
Canada

Transports
Canada

CL 8804 (E)

Road Safety

Sécurité routière

LEAFLET

TP 2436

FEUILLET

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May 1988

1987 Preliminary Fatality Statistics

During 1987, there were 4280 fatalities in Canada, an increase of 5.1% over 1986 fatalities, and an increase of 2.3% compared to the average fatalities in the last three years.

During this twelve month period, motor vehicle driver, passenger, pedestrian, bicyclist and motorcyclist fatalities (at 1942, 1112, 640, 120 and 370) increased by 3.4%, 1.3%, 14.9%, 12.1% and 4.2% respectively over fatalities among the same road user classes during the same period in 1986.

1987 Preliminary Fatality Statistics														% Change	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total	Last Year	Last 3 Years
Nfld.	6	3	6	3	1	6	7	5	8	6	6	4	61	0.0	-1.6
P.E.I.	1	1	1	0	0	2	2	6	0	1	1	3	18	-37.9	-44.3
N.S.	17	6	6	10	10	9	26	16	14	14	15	18	161	20.1	10.3
N.B.	6	11	10	7	15	9	20	11	10	21	18	13	151	16.2	5.6
Que.	59	37	45	71	115	120	132	121	98	117	89	111	1115	6.1	-8.7
Ont.	71	82	62	65	111	127	144	134	116	127	107	83	1229	11.5	7.6
Man.	3	4	9	11	16	22	15	25	21	19	19	23	156	-7.1	9.3
Sask.	10	10	16	15	24	26	21	32	21	19	19	23	236	-3.7	4.1
Alta.	27	21	33	45	55	52	48	54	43	42	61	29	510	-2.5	0.3
B.C.	47	34	28	45	61	48	58	77	64	58	57	45	622	3.8	16.1
Yukon	0	0	0	0	0	2	3	4	1	1	0	1	12	-29.4	0
N.W.T.	1	0	1	2	3	0	1	0	0	1	0	0	9	-25.0	-34.1
Canada	248	209	217	274	411	423	477	485	396	416	383	341	4280	5.1	2.3

1987 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for 1987.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	124	75	41	-	3	5	248
Feb.	92	58	47	2	3	7	209
Mar.	98	53	48	4	7	7	217
Apr.	116	68	44	9	30	7	274
May	199	93	38	14	50	17	411
June	182	103	54	17	59	8	423
July	202	134	49	25	63	4	477
Aug.	206	132	51	18	69	9	485
Sept.	175	93	60	13	50	5	396
Oct.	190	105	80	8	27	6	416
Nov.	189	108	56	9	14	7	383
Dec.	169	90	72	1	1	8	341
Total	1942	1112	640	120	376	90	4280

* Includes passengers

Fatality Trends by Road User Class and Province/Territory
1986 - 1987

The following table presents comparisons of 1986 and 1987 preliminary fatality estimates by road user class and province/territory. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1986	1987	Percent Change	1986	1987	Percent Change	1986	1987	Percent Change	1986	1987	Percent Change	1986	1987	Percent Change
Canada	1879	1942	3.4	1098	1112	1.3	557	640	14.9	107	120	12.1	361	376	4.2
Alberta	257	254	-1.2	165	146	-11.5	52	59	13.5	9	9	-	31	30	-3.2
British Columbia	237	250	5.5	190	174	-8.4	94	97	3.2	17	20	17.6	58	63	8.6
Manitoba	11	5	-54.5	2	4	200.0	3	0	-	-	1	-	1	0	-
Ontario	61	65	6.6	55	46	-16.4	30	26	-13.3	5	6	20.0	16	9	-43.8
Quebec	107	109	1.9	81	67	-17.3	28	36	28.6	8	5	-37.5	10	9	-10.0
Saskatchewan	54	71	31.5	37	50	35.1	25	12	-52.0	1	7	700.0	7	6	-14.3
Yukon	2	2	0.0	1	1	0.0	1	1	0.0	0	0	0.0	0	0	0.0
N.W.T.	4	4	-	4	0	-	3	0	-	-	0	-	-	0	-
P.E.I.	13	8	-35.5	11	7	-36.4	3	2	-33.3	2	0	-	-	1	-
Atlantic	63	75	19.0	36	45	25.0	15	28	87.6	3	1	-66.7	17	12	-29.4
Northwest	25	18	-28.0	13	18	-38.5	10	15	50.0	2	0	-	9	7	-22.2

National Trend in Monthly Fatalities

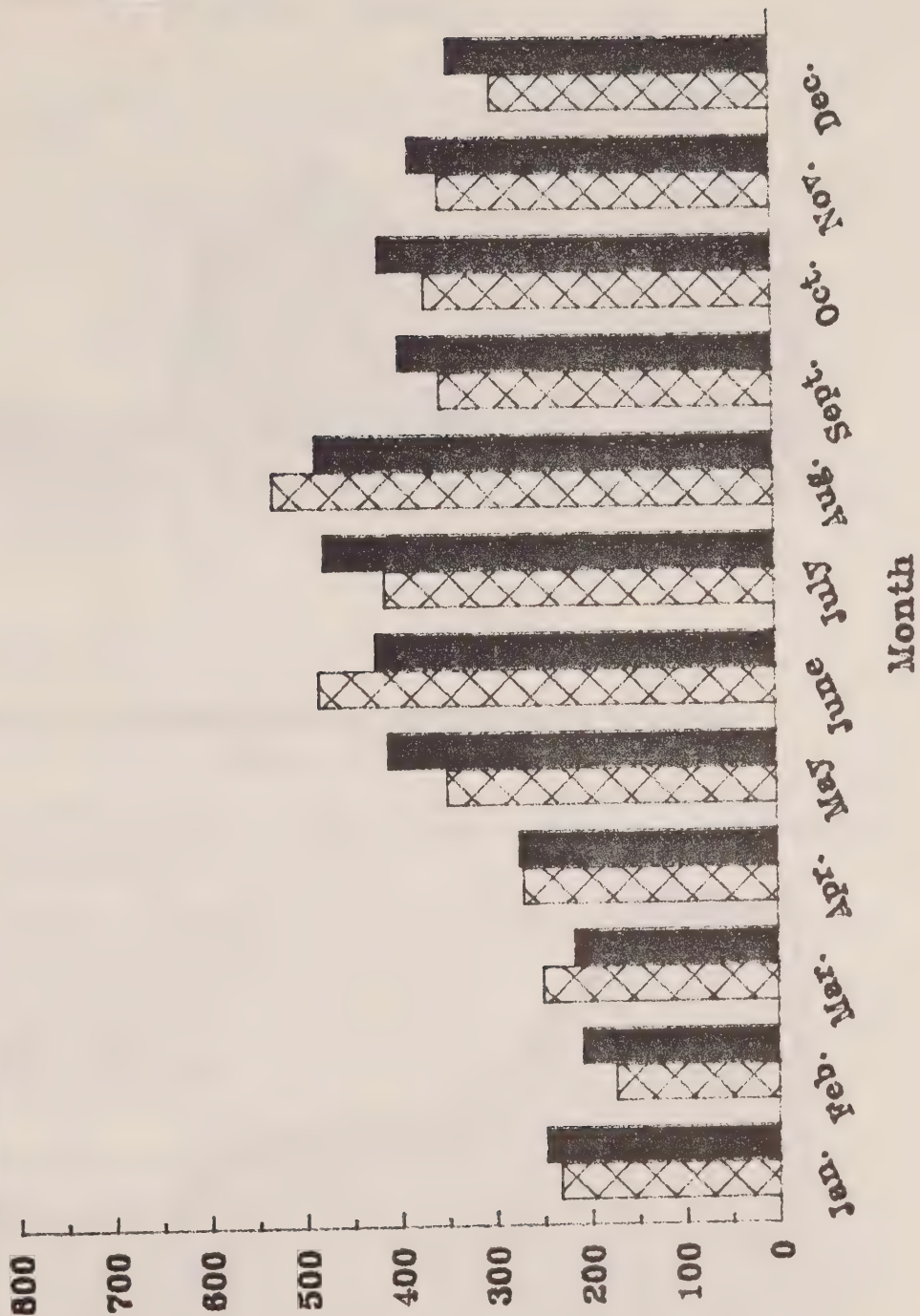
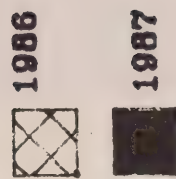
January 1986 - December 1987

The following table and graph summarize fatalities for the last 12-month period (January 1987-December 1987) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities 1986	Fatalities 1987	Percent Change
January	233	248	6.4
February	174	209	20.1
March	250	217	-13.2
April	270	274	1.5
May	349	411	17.8
June	483	423	-12.4
July	413	477	15.5
August	530	485	-8.5
September	353	396	12.2
October	368	416	13.0
November	352	383	8.8
December	296	341	15.2
Jan-Dec Total	4071	4280	5.1

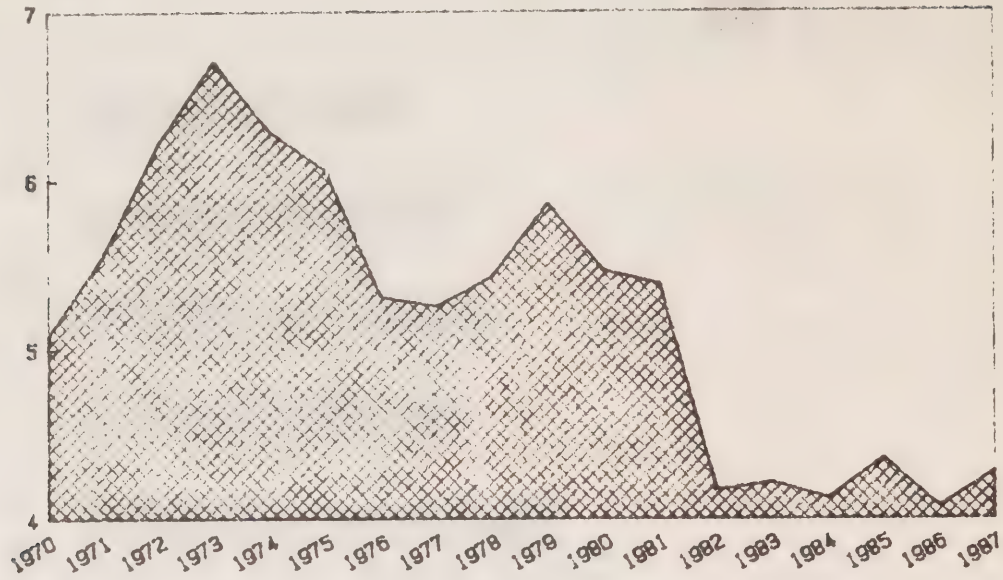
NATIONAL MOTOR VEHICLE TRAFFIC FATALITIES

Number of Fatalities



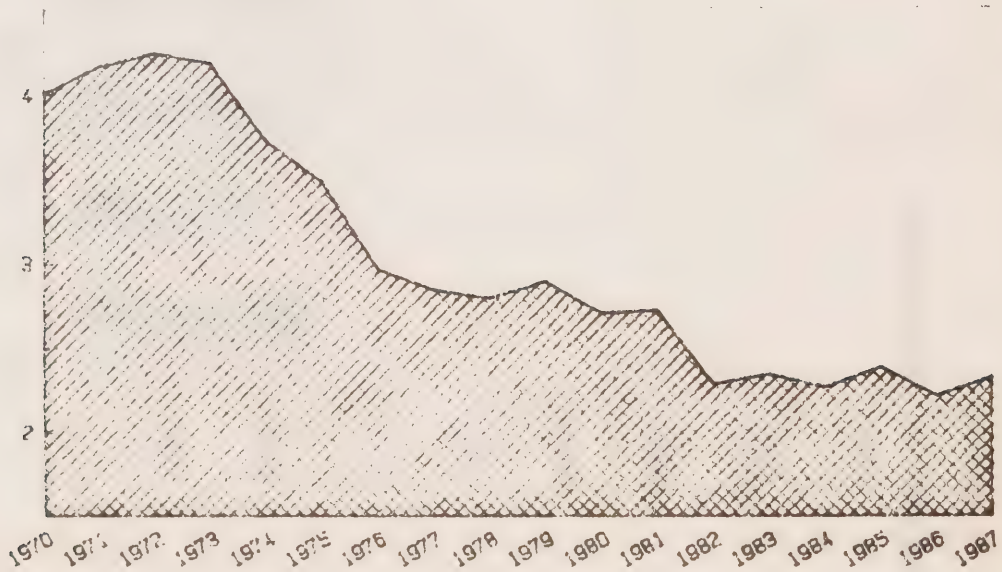
Road Fatalities 1970 - 1987

Killed (000's)



Fatality Rate Per 100 Million Vehicle Kilometres 1970 - 1987

Fatality Rate





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Road Safety

Sécurité routière

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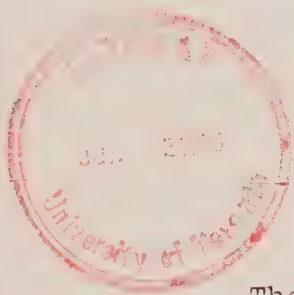
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May 1988

CHANGE OF ADDRESS

The Road Safety Directorate has moved two blocks south of our old residence. Our new address is as follows:

Road Safety Directorate
Transport Canada
Canada Building
344 Slater Street
13th Floor
Ottawa, Ontario
K1A 0N5



The telephone numbers remain the same. All requests for public information material including questions on child restraints should now be directed to Ms. Liz Lisku at 998-1978. Ms. Lisku has replaced Ms. Patricia McAinsh who recently accepted new assignments within the Directorate.

CHANGEMENT D'ADRESSE

La Direction générale de sécurité routière a déménagé à un nouvel édifice, deux rues au sud de notre ancien emplacement. Notre nouvelle adresse est:

Direction générale de la sécurité routière
Transports Canada
Édifice Canada
344, rue Slater
13ième étage
Ottawa (Ontario)
K1A 0N5

Nos numéros de téléphone restent les mêmes.

Veuillez prendre note que toutes demandes pour matériaux qui traitent des renseignements publics, y compris des questions au sujet des ensembles de retenue d'enfants, devraient être adressées à Liz Lisku. Elle a remplacé Patricia McAinsh, qui a accepté un nouveau poste avec une autre division de la Direction générale.



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Road Safety Sécurité routière

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September 1988

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NATIONAL INFORMATION NETWORK ON CHILD RESTRAINT ISSUE

The Road Safety Directorate, Transport Canada, has entered into a two year agreement with the Canadian Automobile Association under which the CAA will assist the Department in providing information to the Canadian public on issues relating to child occupant protection.

Since assuming responsibility for child safety seats, the Road Safety Directorate has attempted to provide the public and special interest groups with information on current developments in the field, as well as to advise parents of recall programs. With over 350,000 births in Canada each year, it was necessary to develop a more effective method of communicating with parents and professionals concerned with issues of child safety.

The Canadian Automobile Association provides the Directorate with the opportunity of utilizing a network of over 110 offices situated across the country. In order to bring this network on line, the Directorate has completed a special three day training session on child restraint issues for the headquarter staff and 18 regional managers of the CAA.

The intent of this program is to build upon the strengths of the services already provided to the public by provincial government offices, and national, provincial and community safety and service organizations. To this end, the program will endeavour to deliver important information on child restraints to the key need-to-know agencies as quickly and as accurately as possible. The CAA will also provide an answering service for anyone having a question on child occupant protection. This will be achieved with minimal disruption to existing programs throughout the country. Each regional club will be meeting with interested agencies within their area to discuss the most effective method of transferring information and of providing the public with answers to their questions.

For further information on this program, contact Mr. Grant Smith, Road Safety Promotion, (613) 998-1977.



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Politique routière

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LEAFLET

TP 2436

FEUILLET

June 1988

1988 Preliminary Fatality Statistics

During the first three months of 1988, there were 679 fatalities in Canada, an increase of 0.7% over the same period in 1986, and an increase of 1.0% compared to the average fatalities for this period in the last three years.

During the first quarter of 1988, motor vehicle driver, passenger and bicyclist fatalities (at 345, 190 and 8) increased by 9.9%, 2.1% and 33.3% respectively while pedestrian and motorcyclist fatalities (at 111 and 5) decreased by 17.2% and 61.5% respectively over fatalities among the same road user classes during the same period in 1987. It should be noted that although bicyclist fatalities increased substantially and motorcyclist fatalities decreased dramatically in percentage terms during this period, the actual numbers involved were very small.

On the basis of the number of road fatalities during the first quarter of this year, the projected traffic fatality total for Canada in 1988 is 4316.

	1988 Preliminary Fatality Statistics					% Change	
	Jan.	Feb.	Mar.	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Nfld.	0	4	4	8	42	-46.7	-33.3
P.E.I.	0	0	1	1	26	-66.7	-57.1
N.S.	9	5	13	27	150	-6.9	0.0
N.B.	11	2	8	21	112	-22.2	-20.3
Que.	75	60	50	185	1282	31.2	8.2
Ont.	87	51	56	194	1205	-9.8	2.6
Man.	5	5	6	16	146	0.0	-4.0
Sask.	11	10	11	32	182	-11.11	-21.3
Alta.	18	23	37	78	429	-3.7	-17.9
B.C.	41	31	44	116	738	6.4	29.9
Yukon	0	1	0	1	18	N/A	50.0
N.W.T.	0	0	0	0	N/A	N/A	N/A
Canada	257	192	230	679	4316	0.7	1.0

1988 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first three months of 1988.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	136	75	39	-	-	7	257
Feb.	98	47	40	2	1	4	192
Mar.	111	68	32	6	4	9	230
Total	345	190	111	8	5	20	679

* Includes passengers

Fatality Trends by Road User Class and Province/Territory - 1987-1988

The following table presents comparisons of fatality estimates by road user class and province/territory for the first three months of 1987 and 1988. This table includes only fatally injured victims whose road user class was known. It should be noted that the dramatic percent changes observed in some cells of this statistical table are the result of the small number of fatalities which occurred in these jurisdictions during the first three months of 1987 and 1988.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change
Nfld.	3	4	33.3	3	3	-	3	1	-66.7	-	-	-	4	-	-
P.E.I.	-	-	-	2	-	-	1	1	-	-	-	-	-	-	-
N.S.	13	17	30.8	8	7	-12.5	8	2	-75.0	-	1	-	-	-	-
N.B.	10	10	-	11	7	-36.4	3	4	33.3	1	-	-	-	-	-
Que.	72	98	36.1	28	53	89.3	32	36	12.5	-	1	-	1	1	-
Ont.	102	94	-7.8	65	56	-13.8	42	34	-19.0	3	1	-66.7	2	-	-
Man.	6	7	16.7	6	3	-50.0	4	5	25.0	-	1	-	-	-	-
Sask.	20	16	-20.0	6	12	100.0	7	4	-42.9	-	-	-	-	-	-
Alta.	43	45	4.7	24	19	-20.8	11	6	-45.5	-	-	-	1	2	100.0
B.C.	43	54	25.6	33	30	-9.1	23	18	-21.7	2	4	100.0	5	2	-60.0
Yukon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N.W.T.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	314	345	9.9	186	190	2.1	134	111	-17.2	6	8	33.3	13	5	-61.5

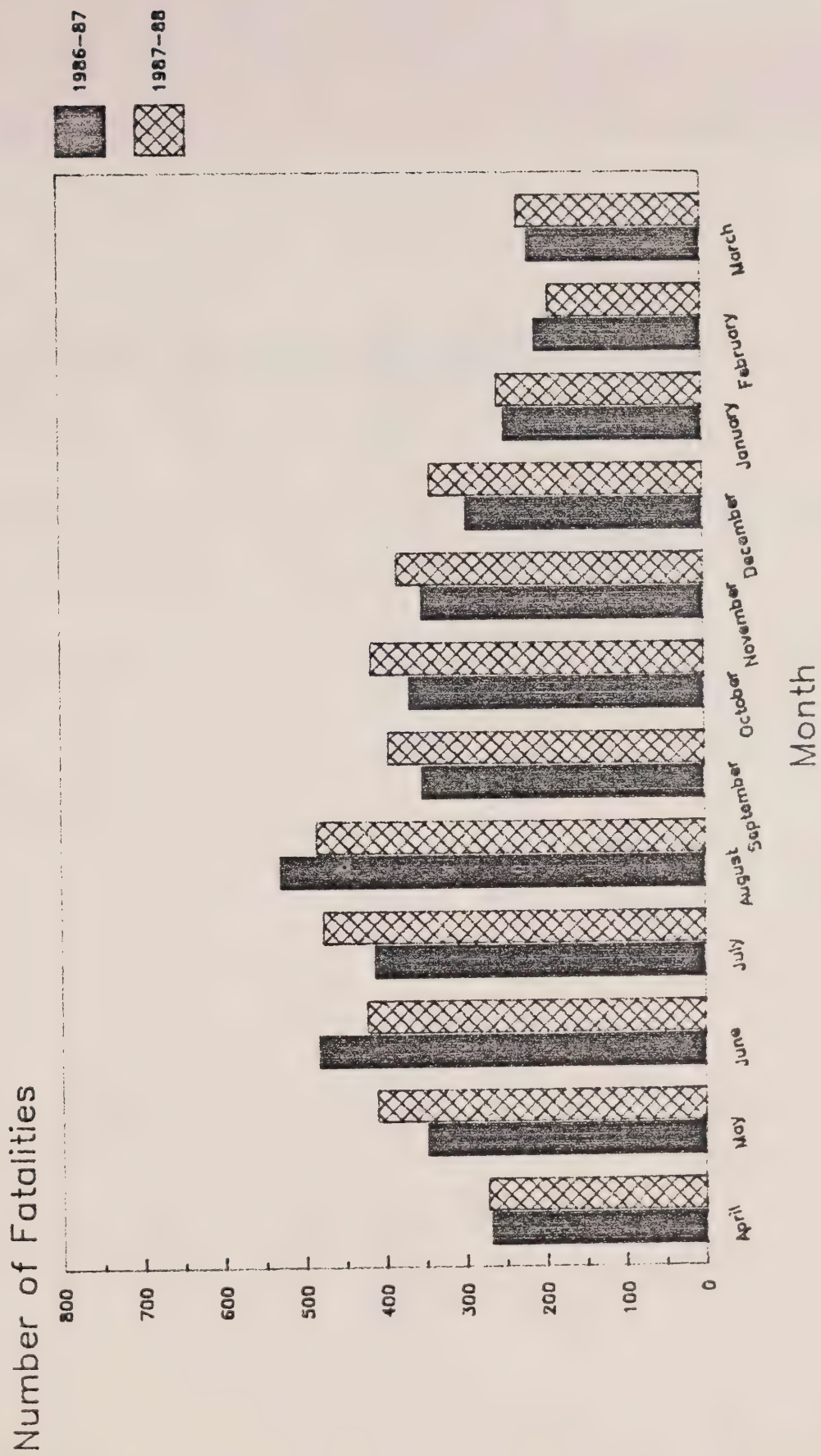
National Trend in Monthly Fatalities

April 1986 - March 1988

The following table and graph summarize fatalities for the last 12-month period (April 1987-March 1988) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities 1986	Fatalities 1987	Percent Change
April	270	274	1.5
May	349	411	17.8
June	483	423	-12.4
July	413	477	15.5
August	530	485	-8.5
September	353	395	11.9
October	368	416	13.0
November	352	383	8.8
December	296	341	15.2
	Fatalities 1987	Fatalities 1988	Percent Change
January	248	257	3.6
February	209	192	-8.1
March	217	230	6.0
Jan.-March Total	674	679	0.7
12 Month Total	4088	4284	4.8

NATIONAL MOTOR VEHICLE TRAFFIC FATALITIES





LEAFLET

TP 2436

FEUILLET

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January 1989

Table 1

Estimates of Shoulder Seat Belt Use
From Annual Surveys 1980-1988% of Car Drivers Wearing Shoulder Belts,
Where Available*

Province	1980	1981	1982	1983	1984	1985	1986	1987	1988
Newfoundland	2.8	8.6	67.8	75.9	69.7	65.5	61.4	64.6	72.4
Prince Edward Island	6.2	3.4	7.2	5.6	9.3	17.9	13.7	50.0	82.0
Nova Scotia	9.3	11.4	8.7	12.1	20.2	80.8	79.8	68.6	73.4
New Brunswick	5.6	8.1	4.2	66.5	60.2	63.4	66.5	65.0	67.6
Quebec	39.0	40.7	67.5	60.4	54.3	53.4	67.7	85.8	81.5
Ontario	43.7	52.5	48.9	60.1	61.9	66.4	65.9	67.6	70.3
Manitoba	6.0	6.4	7.0	11.1	61.6	53.6	61.3	64.6	66.0
Saskatchewan	60.7	50.5	48.4	54.0	49.6	51.1	59.7	71.9	81.0
Alberta	12.7	11.0	17.1	18.2	19.8	24.4	27.8	74.3	82.5
British Columbia	49.3	42.4	53.0	67.4	72.7	73.8	78.3	80.4	79.8
Canada	36.4	38.1	45.6	52.0	54.9	58.4	63.2	74.0	75.8

* Shoulder-belt fitting: 1980 = 95.0% 1984 = 98.0%
1981 = 97.4% 1985 = 97.9%
1982 = 96.8% 1986 = 98.7%
1983 = 96.8% 1987 = 98.7%
1988 = 98.6%

Table 2

Estimates of Shoulder Seat Belt Use
by Type of Vehicle in 1988

Province	Passenger Car	LTV	Total
Newfoundland	72.4	60.2	69.8
Prince Edward Island	82.0	63.6	79.1
Nova Scotia	73.4	58.9	70.9
New Brunswick	67.6	53.3	65.2
Quebec	81.5	72.4	80.4
Ontario	70.3	50.8	67.4
Manitoba	66.0	52.1	63.2
Saskatchewan	81.0	70.4	78.6
Alberta	82.5	74.5	80.6
British Columbia	79.8	65.8	77.0
Canada	75.8	61.6	73.4

Table 3

Estimates of Shoulder Seat Belt Use
by Road Types in 1988

% of Car Drivers Wearing Shoulder Belts

Province	Urban	Rural*	Total
Newfoundland	72.4	82.8	72.9
Prince Edward Island	82.0	81.6	82.0
Nova Scotia	73.4	85.9	74.7
New Brunswick	67.6	59.7	66.3
Quebec	81.5	79.0	81.3
Ontario	70.3	58.8	70.1
Manitoba	66.0	73.3	66.3
Saskatchewan	81.0	77.7	80.9
Alberta	82.5	80.7	82.4
British Columbia	79.8	79.2	79.8
Canada	75.8	71.2	75.5

* Inter city highways or country roads

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 24 to October 30, 1988.

Results

For the first time, Transport Canada collected data on seat belt use by drivers of Light Trucks and Vans (LTV) along with belt use by drivers of passenger cars. First, we will present the findings for the passenger cars survey and then for LTV's.

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased from 74% in 1987 to 76% in 1988 (see Table 1).

Highlights of the results of the passenger cars survey by province were as follows (in rounded percentages):

- Alberta saw belt use top 80% for the first time in these surveys, it stood at 83%, the highest in the country in this year's survey, an impressive increase since the mandatory belt use legislation was passed;
- Quebec's rate has fallen slightly to 82% from the peak rate of 86% in 1987, still very impressive achievement;
- In Prince Edward Island which was the latest province to pass mandatory belt use legislation, use has risen to 82% from 14% in 1986;
- Saskatchewan also saw belt use top 80% for the first time, continuing an impressive increase since 1986;
- Newfoundland also saw an increase in use over 1987, to 72%;
- Minor increases were also observed in Nova Scotia, New Brunswick, Ontario and Manitoba compared to the previous year's survey;
- For the second year running, British Columbia has a belt use of 80%.

There are now five provinces with belt use of 80% or over. It is interesting to note that this year's survey shows that there have been belt rate increases in nine out of ten provinces.

LTV

Table 2 presents the results of shoulder belt use by type of vehicle. For Canada as a whole, the estimated proportion of drivers of LTVs using the available shoulder belts was at 62%. On the whole there were 14% fewer drivers of LTV's wearing belts than drivers of cars. Seat belt use by LTV drivers varies from 51% in Ontario to 75% in Alberta. LTVs make up 21.4% of the total vehicles included in the survey.

Survey Method

The survey was undertaken by observers at 178 urban sites selected by province, road type and community size. The sample is comparable to the samples used in the previous belt use surveys. In addition to these 178 sites, the survey was also undertaken at 22 rural sites (on highways or country roads), and the results from these sites are summarized separately in Table 3. A weighted combined estimate based on all 200 sites is also presented, for which the traffic counts on urban and rural sites are used as weights. The observation techniques in the survey were identical to those of the 1981 to 1987 surveys, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, weather conditions, type of vehicle, driver's sex and age group.

For further information write to:

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LEAFLET

TP 2436

FEUILLET

February 1989

1988 Preliminary Fatality Statistics

During the first six months of 1988, there were 1683 fatalities in Canada, a decrease of 7.2% over the same period in 1987, and a decrease of 6.2% compared to the average fatalities for this period in the last three years.

During the first six months of 1988, motor vehicle passenger, pedestrian and motorcyclist fatalities (at 416, 232 and 102) decreased by 7.3%, 14.1% and 32.0% respectively while motor vehicle driver and bicyclist fatalities (at 851 and 51) increased by 4.9% and 10.9% respectively over fatalities among the same road user classes during the same period in 1987.

On the basis of the number of road fatalities during the first six months of 1988, the projected traffic fatality total for Canada in 1988 is 3976.

1988 Preliminary Fatality Statistics									% Change	
	Jan.	Feb.	Mar.	Apr.	May	June	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Nfld.	0	6	4	3	2	3	18	42	-28.0	-32.5
P.E.I.	0	1	1	1	2	1	6	16	20.0	-43.8
N.S.	9	5	12	6	14	14	60	141	3.4	-5.8
N.B.	11	2	8	16	12	17	66	153	13.8	8.2
Que.	39	50	57	61	81	110	448	1084	0.2	-8.5
Ont.	81	72	74	62	92	98	479	1121	-7.5	-4.5
Man.	5	5	6	10	14	14	54	142	-21.7	-8.5
Sask.	11	11	11	16	17	21	87	201	-13.9	-13.3
Alta.	19	22	38	40	26	38	183	386	-21.5	-26.0
B.C.	41	31	45	48	46	64	275	658	4.6	15.9
Yukon	0	3	0	2	0	0	5	29	400.0	150.0
N.W.T.	0	0	0	0	1	1	2	3	-71.4	-72.7
Canada	266	208	256	265	307	381	1683	3976	-7.2	-6.2

1988 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first six months of 1988.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	136	74	47	-	-	9	266
Feb.	107	53	42	2	1	3	208
Mar.	124	73	40	7	4	3	256
April	129	69	39	6	18	4	265
May	160	67	31	12	35	2	307
June	195	80	33	24	44	5	381
Total	851	416	232	51	102	31	1683

* Includes passengers

Fatality Trends by Road User Class and Province/Territory - 1987-1988

The following table presents comparisons of fatality estimates by road user class and province/territory for the first six months of 1987 and 1988. This table includes only fatally injured victims whose road user class was known. It should be noted that the dramatic percent changes observed in some cells of this statistical table are the result of the small number of fatalities which occurred in these jurisdictions during the first six months of 1987 and 1988.

Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
Percent			Percent			Percent			Percent			Percent		
1987	1988	Change	1987	1988	Change	1987	1988	Change	1987	1988	Change	1987	1988	Change
7	9	28.6	3	5	66.7	5	2	-60.0	0	0	-	5	2	-60.0
1	2	100.0	2	1	-50.0	1	2	100.0	0	0	-	1	1	-
29	35	20.7	15	17	13.3	10	2	-80.0	1	2	100.0	0	-	-
28	32	14.3	16	20	25.0	5	6	20.0	4	3	-25.0	2	4	100.0
218	242	11.0	87	92	5.7	72	68	-5.5	9	16	77.8	44	22	-50.0
231	222	-3.9	141	125	-12.8	78	86	10.3	15	13	-13.3	52	33	-36.5
26	29	11.5	20	14	-30.0	10	6	-40.0	3	3	-	6	2	-66.7
52	48	-7.7	21	27	28.6	15	9	-40.0	3	1	-66.7	4	1	-75.0
115	99	-13.9	68	48	-29.4	28	15	-46.4	4	1	-75.0	11	13	18.2
102	128	25.5	76	65	-14.5	46	36	-21.7	7	12	71.4	25	24	-4.0
-	3	-	-	2	-	-	-	-	-	-	-	-	-	-
2	2	-	-	1	-	-	-	-	-	-	-	-	-	-
811	851	4.9	449	416	-7.3	270	232	-14.1	46	51	10.9	150	102	-32.0

National Trend in Monthly Fatalities

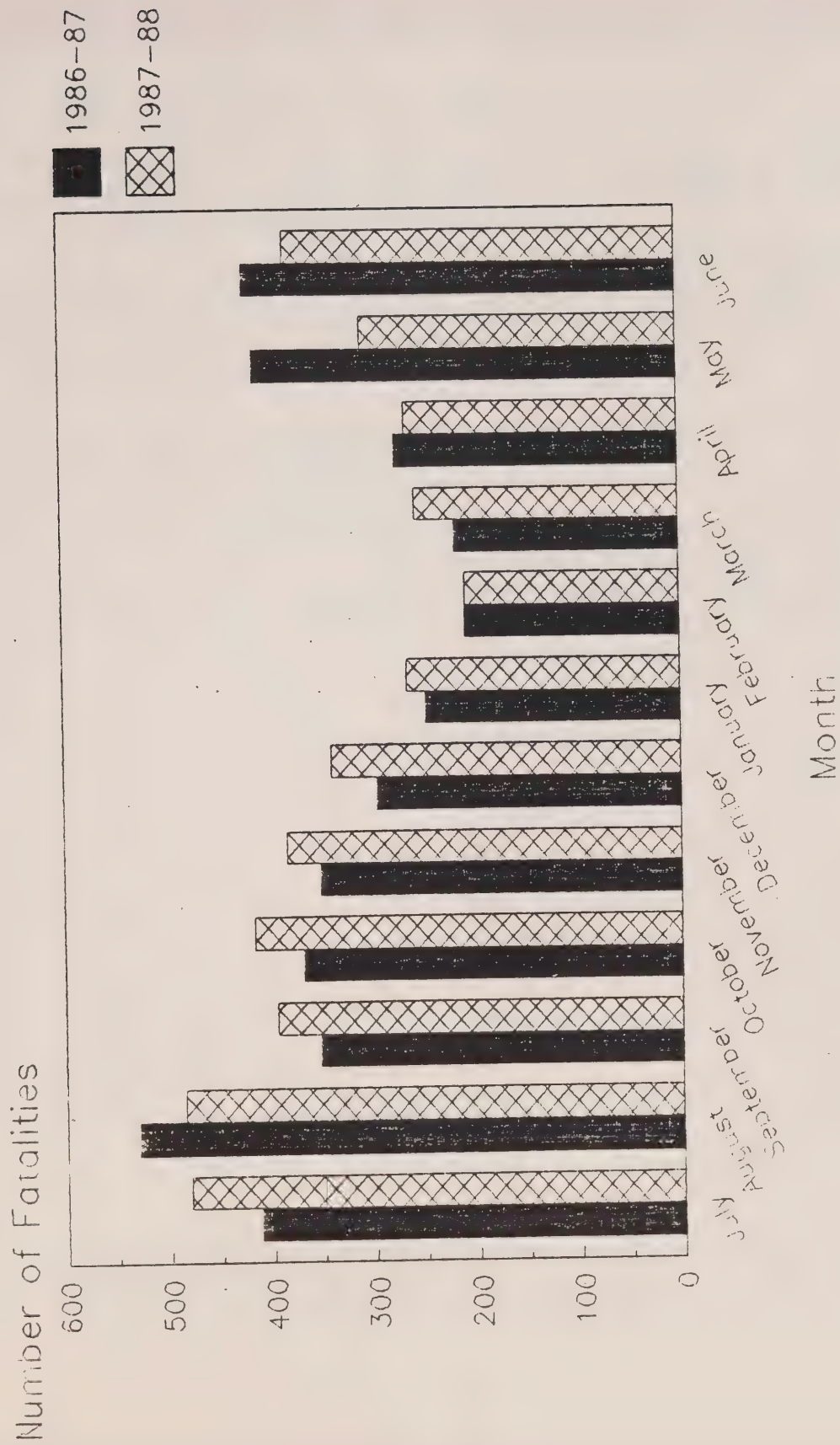
July 1986 - June 1988

The following table and graph summarize fatalities for the last 12-month period (July 1987-June 1988) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities 1986	Fatalities 1987	Percent Change
July	413	480	16.2
August	530	485	-8.5
September	353	395	11.9
October	368	416	13.0
November	352	384	9.1
December	296	340	14.9

	Fatalities 1987	Fatalities 1988	Percent Change
January	248	266	7.3
February	209	208	-0.5
March	218	256	17.4
April	275	265	-3.8
May	413	307	-34.5
June	422	381	-9.7
Jan.-June Total	1785	1683	-5.7
12 Month Total	4097	4183	2.0

PERSONS KILLED IN REPORTABLE ROAD ACCIDENTS IN CANADA



April 1989

1988 Preliminary Fatality Statistics

During the first nine months of 1988, there were 3032 fatalities in Canada, a decrease of 5.0% over the same period in 1987, and a decrease of 4.0% compared to the average fatalities for this period in the last three years.

During the first nine months of 1988, motor vehicle passenger, pedestrian and motorcyclist fatalities (at 793, 389 and 241) decreased by 2.0%, 9.7% and 28.1% respectively while motor vehicle driver and bicyclist fatalities (at 1434 and 112) increased by 3.4% and 10.9% respectively over fatalities among the same road user classes during the same period in 1987.

On the basis of the number of road fatalities during the first nine months of 1988, the projected fatality total for Canada in 1988 is 4073.

1988 Preliminary Fatality Statistics												% Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Nfld.	1	6	4	4	2	3	8	8	5	41	51	- 8.9	-19.1
P.E.I.	0	1	1	1	2	1	0	1	4	11	15	-15.4	-45.9
N.S.	9	5	12	6	14	14	14	20	18	112	153	- 1.8	2.1
N.B.	11	2	8	16	12	17	10	15	17	108	146	9.1	3.5
Que.	89	50	58	61	81	112	137	107	98	793	1071	-0.5	-9.5
Ont.	80	72	74	64	96	98	145	151	126	906	1222	-0.7	4.1
Man.	5	5	6	10	14	14	16	17	16	103	132	-22.6	-15.3
Sask.	11	11	11	16	17	22	22	25	12	147	191	-16.0	-17.4
Alta.	19	22	38	40	26	39	57	49	48	338	445	-10.6	-14.7
B.C.	41	31	45	48	46	65	69	69	48	462	631	0.0	11.1
Yukon	0	3	0	2	0	0	0	2	1	8	12	-11.1	4.3
N.W.T.	0	0	0	0	1	1	1	0	0	3	3	-62.5	-71.9
Canada	266	208	257	268	311	386	479	464	393	3032	4073	-5.0	-4.0

1988 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first nine months of 1988.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	136	74	47	0	0	9	266
Feb.	107	53	42	2	1	3	208
Mar.	123	74	41	7	4	8	257
April	130	69	39	8	18	4	268
May	161	67	32	13	36	2	311
June	197	82	33	24	44	6	386
July	218	137	47	10	56	11	479
Aug.	211	111	52	28	52	10	464
Sept.	151	126	56	20	30	10	393
Total	1434	793	389	112	241	63	3032

* Includes passengers

Fatality Trends by Road User Class and Province/Territory - 1987-1988

The following table presents comparisons of fatality estimates by road user class and province/territory for the first nine months of 1987 and 1988. This table includes only fatally injured victims whose road user class was known. It should be noted that the dramatic percent changes observed in some cells of this statistical table are the result of the small number of fatalities which occurred in these jurisdictions during the first nine months of 1987 and 1988.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change
Alb.	14	19	35.7	8	15	87.5	10	2	-80.0	0	0	N/A	7	3	-57.1
B.C.	5	3	-40.0	6	2	-66.7	2	4	100.0	0	0	N/A	1	1	0.0
Man.	58	57	-1.7	28	30	7.1	15	11	-26.7	1	4	300.0	12	6	-50.0
N.B.	47	50	6.4	28	30	7.1	8	9	12.5	6	4	-33.3	5	12	140.0
N.S.	370	407	10.0	164	172	4.9	119	112	-5.9	30	33	10.0	93	56	-39.8
N.W.T.	396	396	0.0	240	262	9.2	129	130	0.8	30	33	10.0	116	84	-27.6
Ont.	52	48	-7.7	43	23	-46.5	20	16	-20.0	4	5	25.0	10	9	-10.0
P.E.I.	80	73	-8.8	47	50	6.4	28	11	-60.7	5	2	-60.0	9	3	-66.7
Que.	177	174	-1.7	109	88	-19.3	39	30	-23.1	7	6	-14.3	25	27	8.0
Sask.	180	200	11.1	133	118	-11.3	61	63	3.3	18	25	38.9	57	40	-29.8
Yukon	5	4	-20.0	3	3	0.0	0	1	-	0	0	-	-	0	-
W.T.	3	3	-0.0	0	0	-	0	0	-	0	0	-	-	0	-
Canada	1387	1434	3.4	809	793	-2.0	431	389	-9.7	101	112	10.9	335	241	-28.1

National Trend in Monthly Fatalities

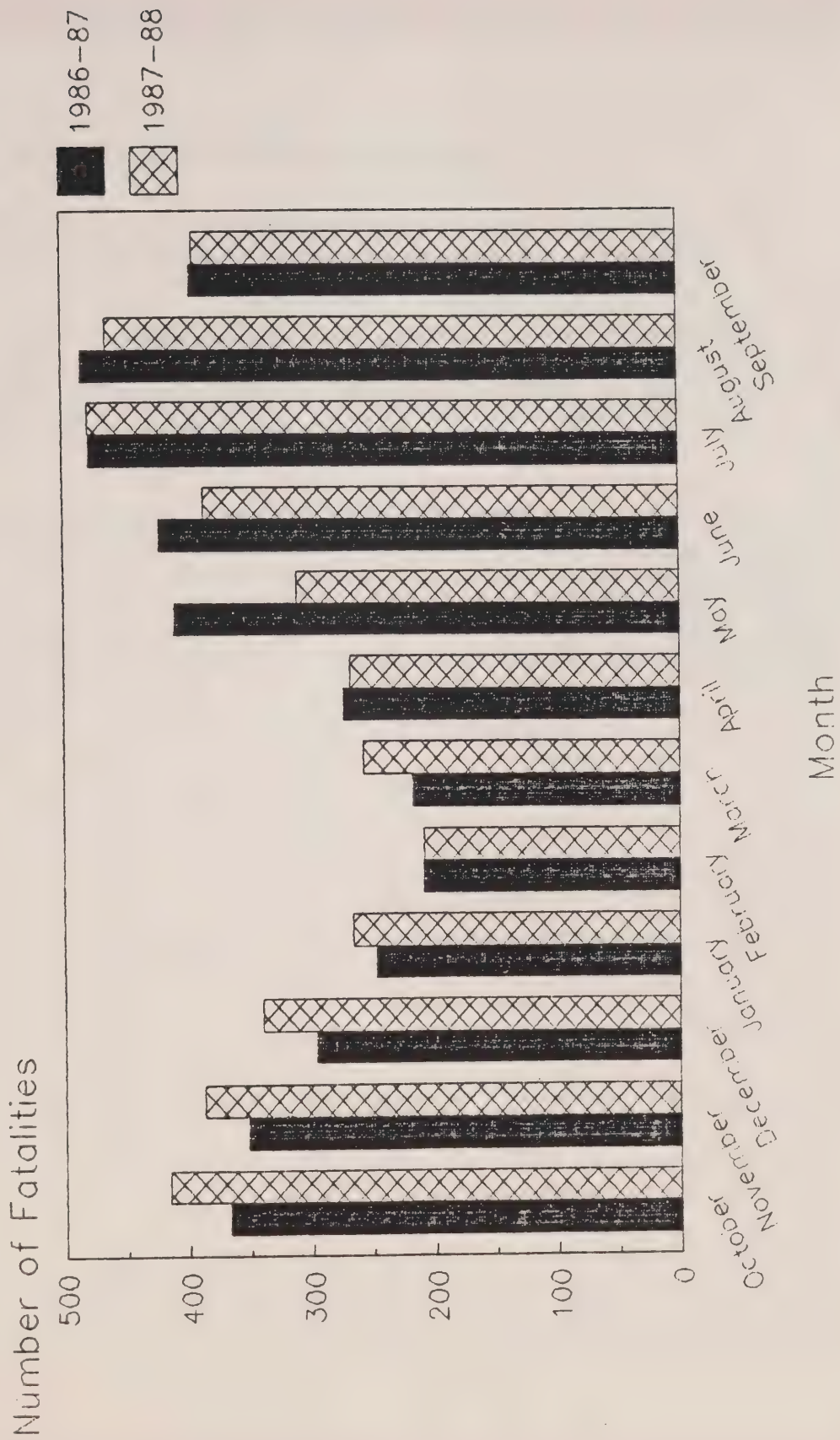
October 1986 - September 1988

The following table and graph summarize fatalities for the last 12-month period (October 1987-September 1988) and compare these figures with statistics for the corresponding period of the previous year.

	Fatalities 1986	Fatalities 1987	Percent Change
October	368	416	13.0
November	352	387	9.9
December	296	340	14.9

	Fatalities 1987	Fatalities 1988	Percent Change
January	248	266	7.3
February	209	208	-0.5
March	218	257	17.9
April	274	268	-2.2
May	411	311	-24.3
June	423	386	-8.7
July	479	479	0.0
August	484	464	-4.1
September	396	393	-0.8
Jan.-June Total	3142	3032	-3.5
12 Month Total	4158	4175	0.4

PERSONS KILLED IN REPORTABLE ROAD ACCIDENTS IN CANADA





LEAFLET

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September 1989

1988 Preliminary Fatality Statistics

During 1988, there were 4151 fatalities in Canada, a decrease of 3.1% over 1987 fatalities, and a decrease of 2.1% compared to the average fatalities in the last three years.

During this twelve month period, motor vehicle driver and bicyclist fatalities (at 2007 and 124) increased by 2.9% and 2.5% respectively while motor vehicle passenger, pedestrian and motorcyclist fatalities (at 1084, 589 and 272) decreased by 2.2%, 7.4% and 37.1% respectively over fatalities among the same road user classes during the same period in 1987.

1988 Preliminary Fatality Statistics													% Change		
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total	Last Year	Last 3 Years
Nfld.	1	6	4	4	2	3	8	8	5	6	4	7	58	-1.7	-7.4
P.E.I.	0	1	1	1	2	1	0	1	4	4	2	4	21	16.7	-25.0
N.S.	9	5	12	6	14	13	14	20	18	19	4	12	146	-9.3	-2.7
N.B.	11	2	8	16	12	17	11	14	18	19	17	19	164	8.6	16.3
Que.	89	50	58	61	82	112	137	107	98	98	91	107	1090	-2.2	-8.0
Ont.	80	71	76	67	97	98	148	152	126	109	103	109	1236	0.6	5.3
Man.	5	5	6	10	13	15	17	16	17	13	16	8	141	-14.5	-9.2
Sask.	11	11	11	16	17	22	22	25	12	21	13	19	200	-15.3	-13.7
Alta.	19	22	38	40	26	39	57	49	47	48	32	47	464	-9.0	-11.1
B.C.	41	31	45	48	46	65	69	69	48	59	46	48	615	-1.1	8.3
Yukon	0	3	0	2	0	0	0	2	1	1	1	2	12	9.1	2.9
N.W.T.	0	0	0	0	1	1	1	0	0	1	0	0	4	-55.6	-65.7
Canada	266	207	259	271	312	386	484	463	394	398	329	382	4151	-3.1	-2.1

1988 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for 1988.

Month	Driver	Passenger	Pedestrian	Bicyclist	*Motorcyclist	Not Stated	Total
Jan.	136	74	47	0	0	9	266
Feb.	106	53	42	2	1	3	207
Mar.	123	76	41	7	4	8	259
Apr.	130	70	40	9	18	4	271
May	160	67	33	14	36	2	312
June	196	83	34	24	45	4	386
July	221	138	48	11	58	8	484
Aug.	208	114	52	28	53	8	463
Sept.	149	127	57	20	32	9	394
Oct.	207	99	62	4	20	6	398
Nov.	167	83	66	5	3	5	329
Dec.	204	100	67	0	2	9	382
Total	2007	1084	589	124	272	75	4151

* Includes passengers

Fatality Trends by Road User Class and Province/Territory
1987 - 1988

The following table presents comparisons of 1987 and 1988 preliminary fatality estimates by road user class and province/territory. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change	1987	1988	Percent Change
Nfld.	19	26	36.8	15	21	40.0	11	4	-63.6	1	1	0.0	7	4	-42.9
P.E.I.	8	10	25.0	7	2	-71.4	2	5	150.0	0	0	-	1	2	100.0
N.S.	74	80	8.1	45	38	-15.6	27	15	-44.4	1	4	300.0	13	9	-30.8
N.B.	71	73	2.8	50	51	2.0	12	18	50.0	7	4	-42.9	6	14	133.3
Que.	539	564	4.6	233	242	3.9	178	171	-3.9	38	34	-10.5	101	62	-38.6
Ont.	545	561	2.9	318	353	11.0	187	187	0.0	34	43	26.5	132	91	-31.1
Man.	71	65	-8.5	51	34	-33.3	27	28	3.7	6	5	-16.7	10	9	-10.0
Sask.	109	100	-8.3	67	62	-7.5	36	20	-44.4	5	2	-60.0	9	3	-66.7
Alta.	254	238	-6.3	146	122	-16.4	59	50	-15.3	9	6	-33.3	30	31	3.3
B.C.	250	278	11.2	172	156	-9.3	97	90	-7.2	20	25	25.0	64	47	-26.6
Yukon	6	8	33.3	4	3	-25.0	0	1	-	0	0	-	0	0	-
N.W.T.	4	4	0.0	0	0	-	0	0	-	0	0	-	0	0	-
Canada	1950	2007	2.9	1108	1084	-2.2	636	589	-7.4	121	124	2.5	373	272	-37.1

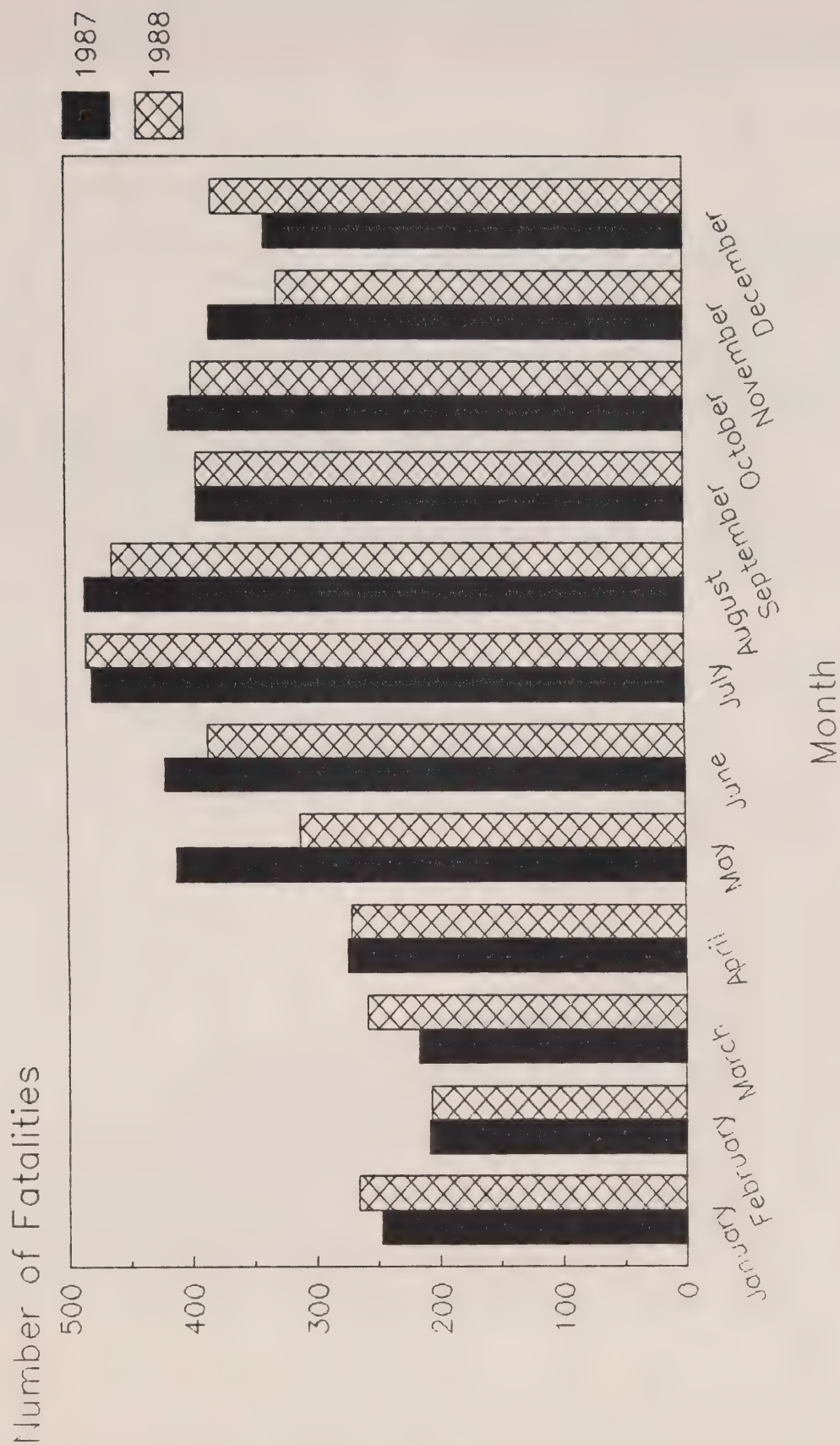
National Trend in Monthly Fatalities

January 1987 - December 1988

The following table and graph summarize fatalities for the last 12-month period (January 1988-December 1988) and compare these data with statistics for the corresponding period of the previous year.

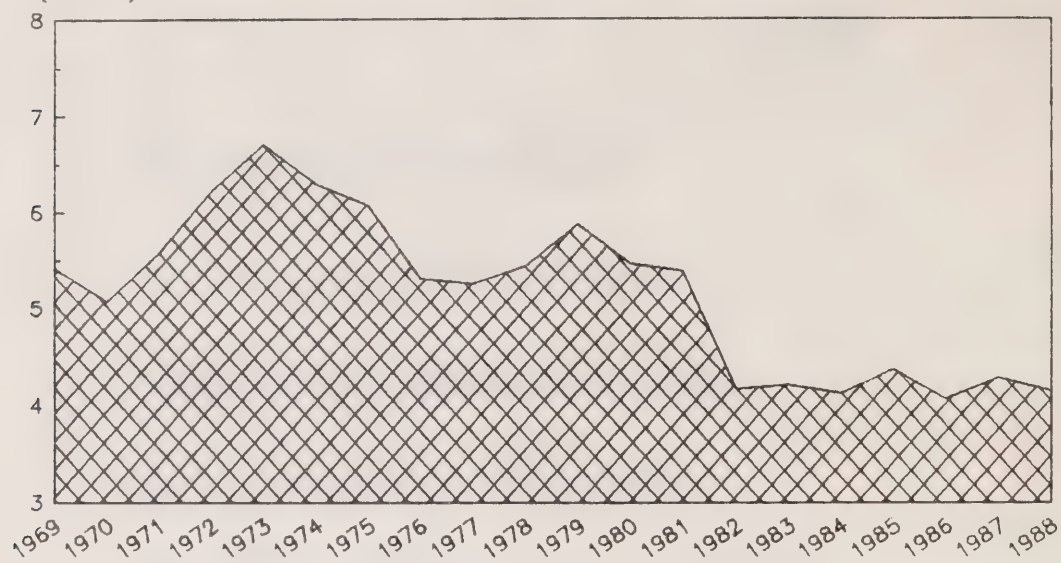
	Fatalities 1987	Fatalities 1988	Percent Change
January	248	266	7.3
February	209	207	-1.0
March	218	259	18.8
April	275	271	-1.5
May	413	312	-24.5
June	422	386	-8.5
July	480	484	0.8
August	485	463	-4.5
September	395	394	-0.3
October	416	398	-4.3
November	384	329	-14.3
December	340	382	12.4
Jan-Dec Total	4285	4151	-3.1

PERSONS KILLED IN REPORTABLE ROAD ACCIDENTS IN CANADA



Road Fatalities 1970 - 1988

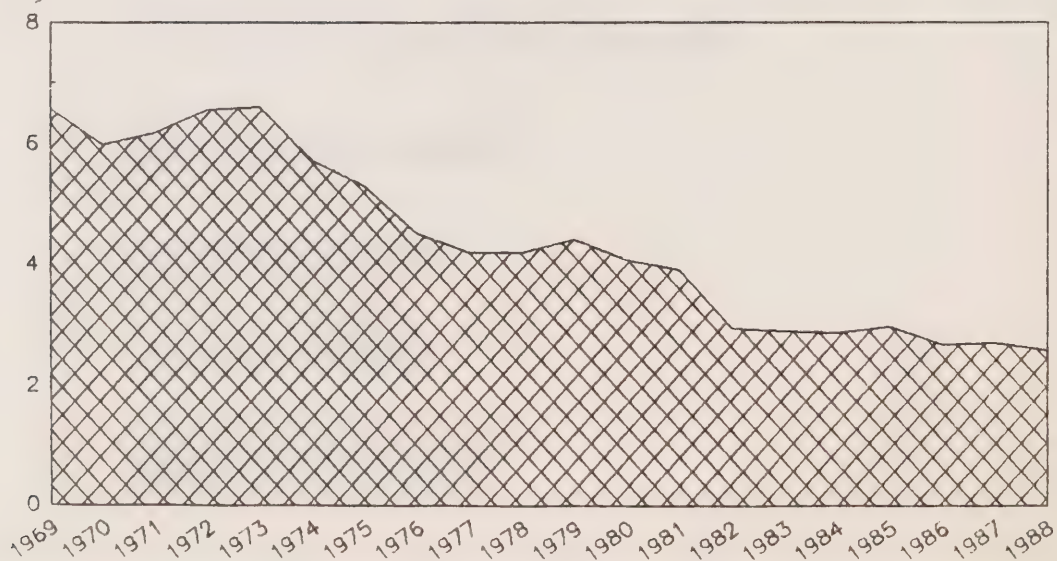
Killed (000's)



Fatality Rate Per 10,000

Motor Vehicles Registered
1970 - 1988

Fatality Rate





Transport
Canada

Transports
Canada

Road Safety

Sécurité routière

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LEAFLET

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FEUILLET

November 1989

Preliminary Fatality Statistics

During the first six months of 1989, there were 1720 fatalities in Canada, an increase of 1.6% over the number of traffic deaths recorded during the same period last year.

During this period, motor vehicle driver, pedestrian, motorcyclist and bicyclist fatalities (at 842, 224, 98 and 40) decreased by 1.1%, 4.7%, 8.4% and 28.6% respectively while motor vehicle passenger fatalities (at 483) increased by 14.2% over fatalities among the same road user classes during the same period in 1988.

The projected traffic fatality total for Canada in 1989 is 4107. This total represents a 1.1% decrease over annual road accident deaths in 1988 and a decrease of 1.5% compared to the average annual fatalities during the last three years.

1989 Preliminary Fatality Statistics									Percent Change	
	January	February	March	April	May	June	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Nfld.	4	6	2	7	4	4	27	71	35.0	19.1
P.E.I.	1	1	2	1	0	2	7	23	16.7	0.0
N.S.	10	8	8	6	3	5	40	100	-32.2	-32.2
N.B.	13	8	10	15	11	17	74	181	12.1	22.0
Que.	76	73	62	71	95	111	488	1183	8.0	9.0
Ont.	71	74	76	98	98	111	528	1270	8.0	6.8
Man.	10	3	7	8	9	7	44	113	-18.5	-28.6
Sask.	14	6	14	18	16	13	81	192	-8.0	-15.6
Alta.	25	29	24	28	34	38	178	392	-3.3	-21.4
B.C.	44	40	33	29	37	62	245	566	-11.2	-7.5
Yukon	0	0	0	1	0	0	1	5	-80.0	-62.5
N.W.T.	0	1	1	0	2	3	7	11	250.0	31.3
Canada	268	249	239	282	309	373	1720	4107	-1.1	-1.5

1989 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first six months of 1989.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	121	96	42	2	1	6	268
February	130	70	35	2	1	11	249
March	123	70	36	2	2	6	239
April	144	63	42	8	23	2	282
May	148	80	35	14	27	5	309
June	176	104	34	12	44	3	373
Total	842	483	224	40	98	33	1720

Fatality Trends By Road User Class and Province/Territory - 1988-1989

The following table presents comparisons of fatality estimates by road user class and province/territory for the first six months of 1988 and 1989. This table includes only fatally injured victims whose road user class was known. It should be noted that the dramatic percent changes observed in some cells of this statistical table are the result of the small number of fatalities involved.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change
NFLD.	10	9	-10.0%	6	9	50.0%	2	6	200.0%	0	1	-	1	2	100.0%
P.E.I.	2	2	0.0%	1	2	100.0%	2	1	-50.0%	0	1	-	1	0	-100.0%
N.S.	35	23	-34.3%	17	11	-35.3%	2	4	100.0%	2	1	-50.0%	1	1	0.0%
N.B.	31	36	16.1%	21	22	4.8%	6	10	66.7%	3	0	-100.0%	4	4	0.0%
QUE.	243	252	3.7%	92	106	15.2%	70	62	-11.4%	16	16	0.0%	26	36	38.5%
ONT.	222	246	10.8%	128	153	19.5%	88	78	-11.4%	17	11	-35.3%	34	36	5.9%
MAN.	28	20	-28.6%	14	16	14.3%	5	6	20.0%	3	1	-66.7%	2	1	-50.0%
SASK.	48	52	8.3%	28	20	-28.6%	9	6	-33.3%	1	1	0.0%	1	1	0.0%
ALTA	99	94	-5.1%	48	56	16.7%	15	20	33.3%	2	0	-100.0%	13	7	-46.2%
B.C.	128	104	-18.8%	66	86	30.3%	36	31	-13.9%	12	8	-33.3%	24	10	-58.3%
YUK.	3	0	-100.0%	2	0	-100.0%	0	0	-	0	0	-	0	0	-
N.W.T.	2	4	100.0%	0	2	-	0	0	-	0	0	-	0	0	-
CANADA	851	842	-1.1%	423	483	14.2%	235	224	-4.7%	56	40	-28.6%	107	98	-8.4%

National Trend in Monthly Fatalities

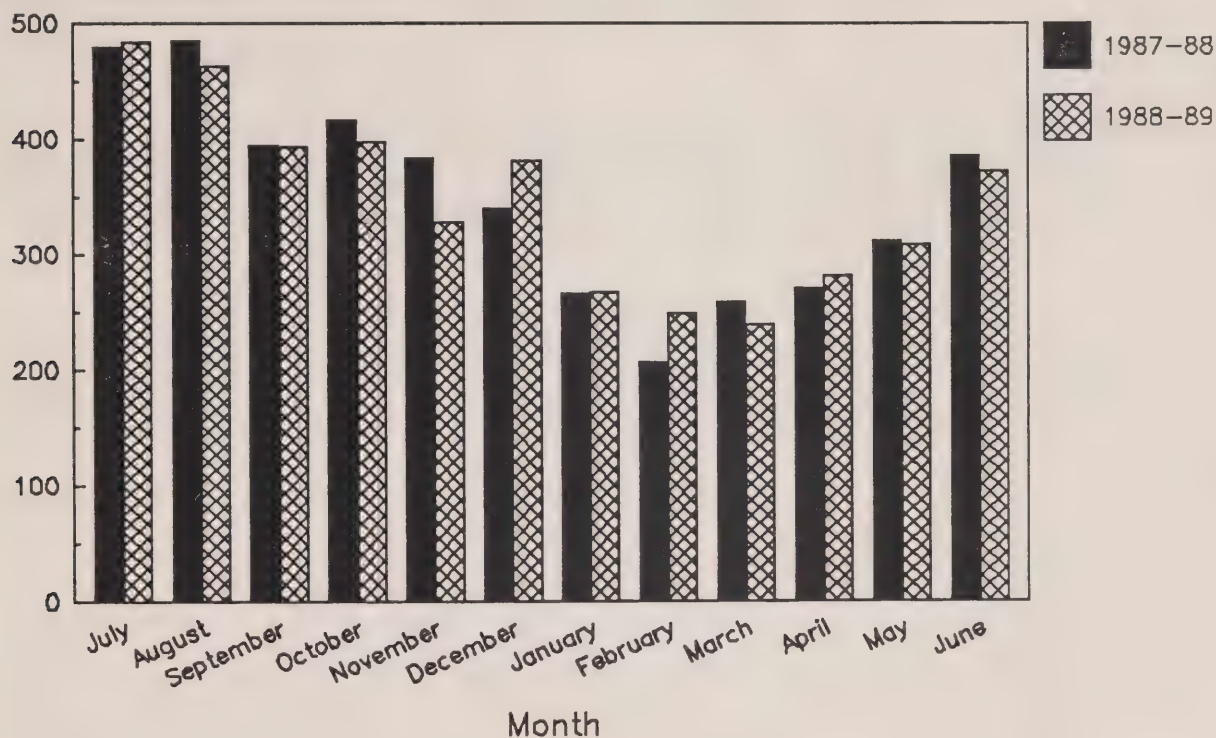
July 1987 - June 1989

The following table and graph summarize fatalities for the last 12-month period (July 1988 - June 1989) and compare these data with statistics for the corresponding period of the previous year.

	Fatalities	Fatalities	% Change
	1987	1988	1988/1987
July	480	484	0.8%
August	485	463	-4.5%
September	395	394	-0.3%
October	416	398	-4.3%
November	384	329	-14.3%
December	340	382	12.4%
	1988	1989	1989/1988
January	266	268	0.8%
February	207	249	20.3%
March	259	239	-7.7%
April	271	282	4.1%
May	312	309	-1.0%
June	386	373	-3.4%
Jan. - June Total	1701	1720	1.1%
12 Month Total	4201	4170	-0.7%

PERSONS KILLED IN REPORTABLE ROAD ACCIDENTS IN CANADA

Number of Fatalities



LEAFLET

TP 2436

FEUILLET

CHILD RESTRAINT USE IN CANADA: 1989 SURVEY DATA

CA1
T260
-L21

The fourth national survey of child occupant restraint use was conducted during the week of October 23 to October 29, 1989, at 130 sites across Canada. Passenger vehicles stopped at red lights were observed during daylight hours to determine the type of occupant restraint used by children under 16 years of age.

1. Types of restraints used

Table 1 presents restraint use and non-use for each of the various age groups in the survey. The results show that 67.5% of the children observed in the survey used seat belts or child restraint devices, while the remainder were unrestrained. Restraint usage was lowest for the 5-9 year olds (60.2%) and highest for the age group under 1 year (87.2%).

Two particularly dangerous situations were observed among the unrestrained children in the survey: sitting on a passenger's lap and standing up in the vehicle. The percentage of children carried on laps was 10.3% for those under 1 year and 4.7% for 1-4 year olds. Standing was reported for 8.7% of 1-4 year olds and 5.3% of 5 to 9 year olds.

2. Appropriate restraint use by province and age

The survey results presented in Table 2 give the percentages of children in restraint systems appropriate to their ages, according to the following criteria: under 1 year - infant carrier or child seat; 1-4 years - child seat, booster seat or seat belt; 5 to 9 years - booster seat or seat belt; 10 to 15 years - seat belt. Across Canada, the total use of appropriate types of restraint systems was 66.7%. The youngest age group (under 1 year) showed the highest appropriate restraint use (85.4%) while the 5-9 year olds had the lowest appropriate use (59.6%). Over all age groups, the provincial totals ranged from 47.8% in Quebec to 83.5% in P.E.I.

3. Proper use of restraints

Table 3 shows proper use of appropriate restraints by children under 5 years of age. For the first time, the child restraint survey collected information on whether infant carriers were installed in the vehicle in the correct rear-facing direction. The collection of this additional data provides valuable information concerning the restraint of infants, however, it also means that the proper use results for the age group under 1 year, and the total for children under 5 years cannot be compared with the results reported for previous surveys.

The total proper use for children under 5 was 58.1% with results of 38.8% for the under 1 age group and 63.6% for the 1-4 age group.



4. Infant carriers, child seats and booster seats

In many cases, children were not correctly fastened into their infant carriers, child seats or booster seats or the restraint system was not correctly installed in the vehicle. Table 4 indicates correct use and types of incorrect use for children under 5 years of age observed in infant carriers, child seats and booster seats.

For children under 1 year, the results show that 30.7% of infant carriers were incorrectly installed in a forward-facing position in the vehicle. For child seat users in the under 1 age group, the most common error was failure to install the tether strap which is required to anchor the top of the child seat to the vehicle to prevent the seat from moving forward in a collision (38.6% non-use).

For children aged 1-4 in child seats, non-use of the tether strap was also the main type of improper use (32.9% non-use). Booster seats were used correctly in most cases for this age group, with only 6.8% non-use of the seat belt.

5. Overall proper use

Table 5 presents the results for all age groups and shows the overall proper use of restraint systems by province and as a total for Canada. Overall proper use is an estimate of the percent of children in the survey who appear to be properly restrained; that is, the percent using seat belts as restraints or correctly using infant carriers, child seats or booster seats, whichever is appropriate for the age group. As noted for the proper use results reported in section 3, the overall proper use results also cannot be compared with the results reported for previous surveys.

The results indicate that 51% of the children in the survey used seat belts or were properly secured in child restraint systems appropriate to their ages. For children under 5 years of age, overall proper use was 40.8%.

For further information write to:

Road Users Division,
Traffic Safety Standards and Research,
Transport Canada,
13th Floor,
344 Slater Street,
Ottawa, Ontario
K1A 0N5

Table 1

Type of Restraint by Age Group
in Percent from 1989 Survey

Type of Restraint	Age Group				Total
	Under 1	1-4	5-9	10-15	
Restrained					
Infant carrier	48.7	1.1	0.0	0.0	5.2
Child seat	36.7	32.6	0.5	0.1	17.8
Booster seat	0.9	7.3	1.6	0.0	3.7
Seat belt	0.9	27.0	58.1	67.8	40.8
Total Restrained	87.2	68.0	60.2	67.9	67.5
Unrestrained					
On lap	10.3	4.7	1.1	0.5	3.4
Standing	0.8	8.7	5.3	0.9	5.6
Other unrestrained	1.7	18.6	33.4	30.7	23.5
Total Unrestrained	12.8	32.0	39.8	32.1	32.5
Total	100.0	100.0	100.0	100.0	100.0

Table 2

Appropriate Restraint Use by Province and Age
in Percent from 1989 Survey^a

Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.	CANADA
Under 1 year	89.1	86.4	82.2	87.2	87.2	80.7	87.0	90.0	87.1	73.8	85.4 ^a
1-4 years	80.1	57.1	76.5	61.5	76.7	46.5	57.0	75.3	83.4	64.9	66.9
Total under 5 years	81.7	62.7	77.5	66.5	78.9	51.8	61.2	77.3	84.0	66.4	70.3
5-9 years	72.9	46.5	79.0	61.5	65.9	37.2	47.2	66.6	81.1	65.2	59.6
10-15 years	81.6	47.7	84.2	58.0	72.7	52.8	63.6	73.3	87.1	73.0	67.8
All cases	78.9	56.4	79.2	63.8	73.7	47.8	57.0	73.1	83.5	67.2	66.7
Number of cases	2235	2533	1653	694	3372	2583	582	1137	312	1662	16763

a. Percents for Canada are weighted by provincial populations.

Table 3

Proper Use of Appropriate Restraints by Province and Age
in Percent from 1989 Survey

Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.	CANADA ^a
Under 1 year	40.9	51.6	47.4	17.6	33.9	43.0	15.0	43.4	55.6	41.0	38.8 ^b
1-4 years	57.6	63.4	71.0	58.9	61.6	63.3	80.7	74.3	74.0	79.7	63.6 ^c
Total under 5 years	54.3	60.2	66.7	48.4	55.3	58.4	67.8	69.5	71.1	72.6	58.1
Number of cases	894	879	549	235	1253	687	181	391	128	531	5728

a. Percents for Canada are weighted by provincial populations.

b. Note that infant carriers must be installed facing the rear of the vehicle. This is the first survey year that data were collected on whether infant carriers were forward or rear-facing.

c. Children aged 1-4 years who were using seat belts were classified as proper users of appropriate restraints, as in previous surveys.

Table 4
Use of Child Restraint Systems

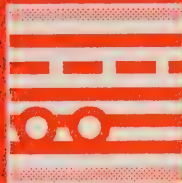
Age and Restraint	Number	Percent
<u>Under 1 year</u>		
Infant carrier		
Correctly used	328	63.8
No harness	14	2.7
No seat belt	8	1.6
No belt or harness	6	1.2
Forward facing	158	30.7
Total	514	100.0
Child seat		
Correctly used	166	54.8
No harness	5	1.6
No seat belt	10	3.4
No belt or harness	5	1.6
No tether	117	38.6
Total	303	100.0
<u>Age 1-4 years</u>		
Child seat		
Correctly used	713	56.1
No harness	77	6.1
No seat belt	46	3.6
No belt or harness	16	1.3
No tether	418	32.9
Total	1270	100.0
Booster seat		
Correctly used	452	93.2
No seat belt	33	6.8
Total	485	100.0

Table 5

Overall Proper Use by Province and Age
in Percent from 1989 Survey

Age	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.	CANADA
Under 1 year	36.4	44.6	38.9	15.4	29.5	34.7	13.0	39.1	48.4	30.3	33.1 ^a
1-4 years	46.1	36.2	54.4	36.2	47.3	29.4	46.0	56.0	61.7	51.8	42.5
Total under 5 years	44.4	37.8	51.7	32.2	43.6	30.2	41.4	53.7	59.7	48.2	40.8
5-9 years	72.4	46.4	78.8	59.5	65.4	37.1	47.2	66.1	81.1	65.0	59.3
10-15 years	81.6	47.7	84.2	58.0	72.7	52.8	63.6	73.3	87.1	73.0	67.8
All cases	58.9	41.4	66.1	43.8	55.9	35.8	46.6	61.6	71.6	57.9	51.0
Number of cases	2235	2533	1653	694	3372	2583	582	1137	312	1662	16763

a. Percents for Canada are weighted by provincial populations.



**ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE
ACCIDENTS: 1989 AND THE PAST TEN YEARS**

Government
Publications

Background:

This leaflet provides information on blood alcohol concentration (BAC) determined for drivers fatally injured in motor vehicle accidents in the Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹, which consists of data collected from provincial coroners' or medical examiners' reports and reports prepared by investigating police officers. These data are supplied by provincial agencies.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). In 1985, Nova Scotia was added to the database followed by Newfoundland in 1986. In 1987, similar data from Quebec and the two territories became available, making the fatality database representative of all the provinces and territories.

In reporting the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

1. The percentages expressed are the percent of drivers tested for blood alcohol concentration. About 78.5% of fatally injured drivers across Canada were tested for alcohol use in 1989, compared to 77% in 1988. Excluding Quebec, the rate of testing for alcohol use was 83.7%. In Quebec, 64.8% of drivers were tested, slightly higher than 62% in 1988.
2. The 1989 results include data from all provinces and territories in Canada and are based on victims dying within twelve months of the accident. The ten-year results (1980-1989) are based on data from the original seven provinces and include victims whose death occurred within six hours after the accident, a convention established in previous years.

-
1. The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

3. The data include only fatally injured drivers of the principal types of motorized vehicles on public roadways, i.e., automobiles, non-articulated trucks/vans, motorcycles, tractor-trailers and buses. Excluded are snowmobiles, other off-road vehicles, bicyclists, pedestrians and passengers.
4. BACs are reported in milligrams per 100 milliliters of blood, (e.g., .08 = 80 mg% BAC). The percentage of drivers which had been drinking prior to the accident (BAC greater than 1 mg%) and the percentage which were legally impaired (BAC exceeding 80 mg%) are shown separately in the following figures. For clarity, Figures 5 to 7 show only the percent legally impaired.

1989 Characteristics:

In 1989, 1872 out of 2384 fatally injured drivers were tested for level of alcohol in the blood. Among tested drivers, 46.5% had been drinking, a decrease from 50.7% in 1988; 38.8% of tested drivers were legally impaired, a decrease from 40.3% in 1988.

Figures 1 to 3 present data from all of the provinces and the two territories for 1989. Figure 1 shows the percent of fatally injured drivers who had been drinking and the percent legally impaired for each province. (For the Yukon and Northwest Territories, see Table 1 of the Appendix.) Although there appears to be considerable variation among provinces, it must be emphasized that the percentages for the smaller provinces are less reliable (i.e., more subject to chance variation) than those for larger provinces. In addition, provinces east of Ontario (except for Newfoundland with a testing rate of 79.4%) had lower rates of testing (62.5 - 67.6%) than the remaining provinces where rates of testing ranged from about 83% to 91%. Percentages based on lower rates of testing should be interpreted with caution because there is a possibility of selection bias, i.e., drivers suspected of impairment may be more likely to have been tested.

Of the 1872 drivers tested, 79.7% were male and 20.3% were female. Among males, 51.9% had been drinking compared to 25.3% of the females. The corresponding rates of illegal impairment were 43.9% for males and 19.0% for females (figure not provided). Figure 2 shows that among different age groups, the highest proportion of alcohol impairment occurred among 21-35 year olds and then steadily declined after age 35. Examination of BAC by vehicle type (Figure 3) reveals that truck/van (excluding tractor-trailer) drivers had the highest rate of alcohol impairment, followed by motorcycle drivers and automobile drivers.

Trends During the Past Ten Years:

Figures 4 to 7 present data for the ten-year period, 1980 to 1989. To maintain consistency from year to year, only data from the original seven provinces have been aggregated. Findings are based on victims whose death occurred within six hours after the accident.

Figure 4 shows that the general downward trend from 1981 to 1989 continues. In 1989, the percentage of drivers who had been drinking (44.2%) decreased 5.6% from 1988. The percentage of drivers legally impaired (36.3%) continued to decline.

Figure 5 shows that over the ten-year period, female drivers killed are consistently less likely to be impaired by alcohol than are males. Alcohol impairment among males and females continued to decline. In 1989, 16.8% of fatally injured females were legally impaired, compared to 41.4% of males.

Figure 6 shows that the overall downward trend is not exhibited equally by all age groups. The under 25 years group showed the largest decreases over ten years, and the downward trend continued slightly in 1989. The 26-35 years group showed little change over time, except for 1989 where they showed a decrease of 9% from 1988. The 36-45 years group showed an overall downward trend, with an increase of 4.6% in 1989. The 46 and over group continued to decline with its lowest rate ever of 19.3%.

Figure 7 demonstrates that over the ten-year period, fatally injured drivers of trucks/vans have the highest rate of impairment, followed by motorcycle drivers. In fact, the trend lines for the two groups are very similar over time. The rates for both groups increased between 1988 and 1989, with motorcycle drivers showing the largest increase (a 4.9% increase over 1988). The declining trend for automobile drivers continued in 1989 with its lowest ever rate of 33.1%. Tractor-trailers are not included in Figure 7 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Canada Building
Tower 2, 13th Floor
344 Slater Street
Ottawa, Ontario
K1A 0N5

Figure 1
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers by Province: 1989

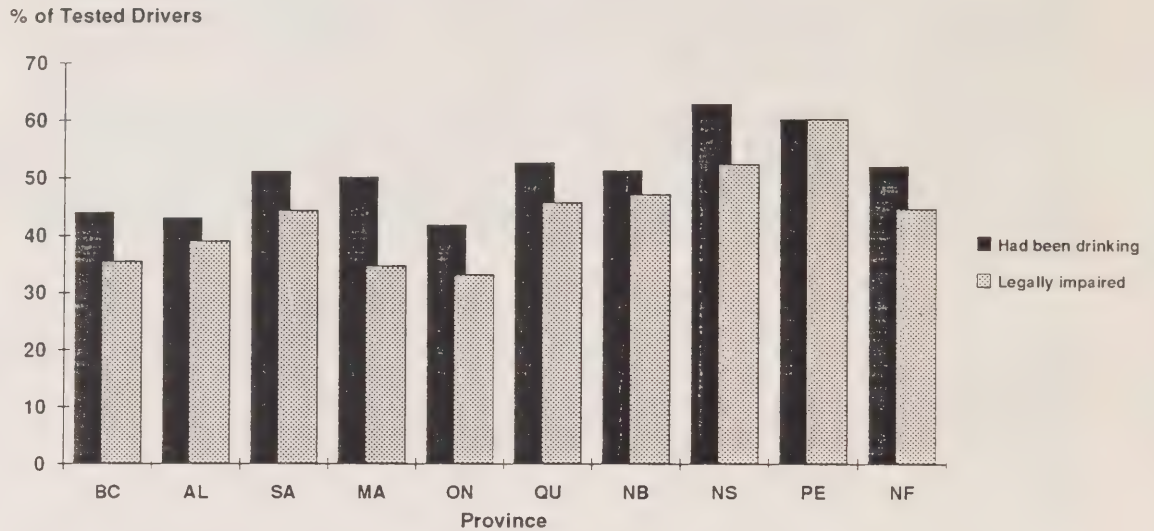


Figure 2
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers by Age: 1989 (Canada)

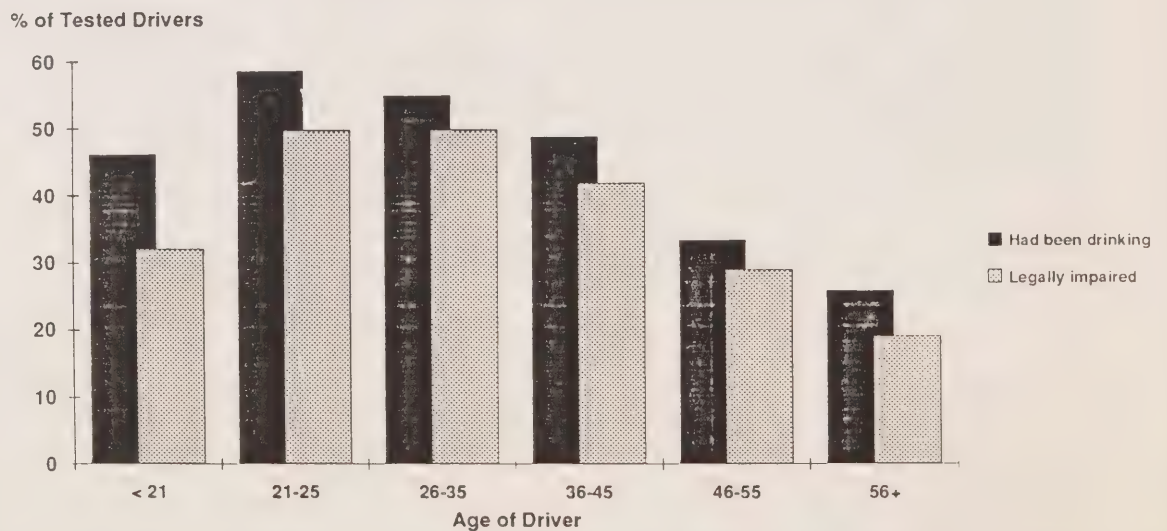


Figure 3
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type: 1989 (Canada)

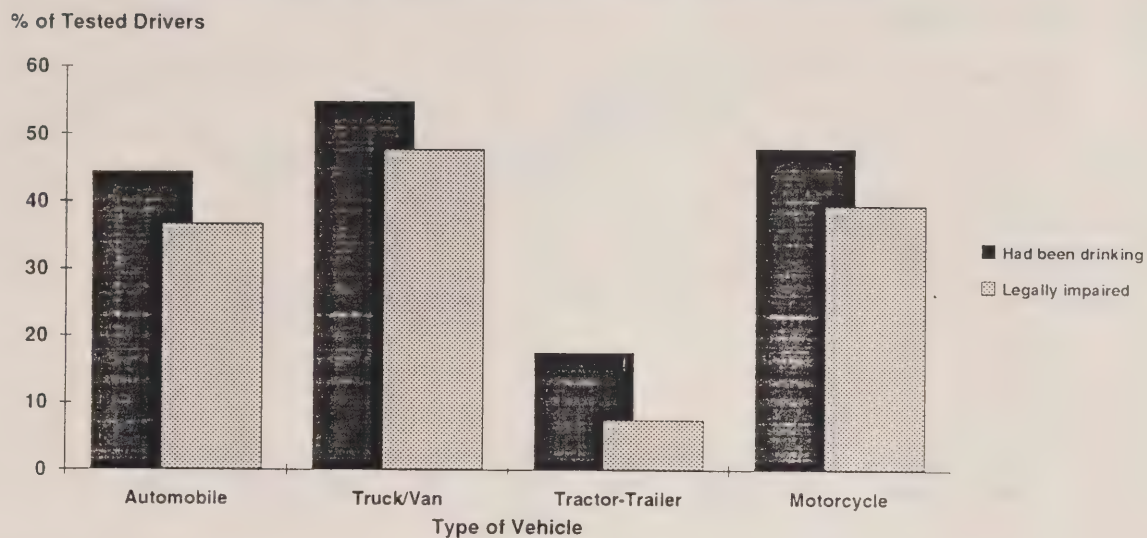


Figure 4
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers: (Seven Provinces)

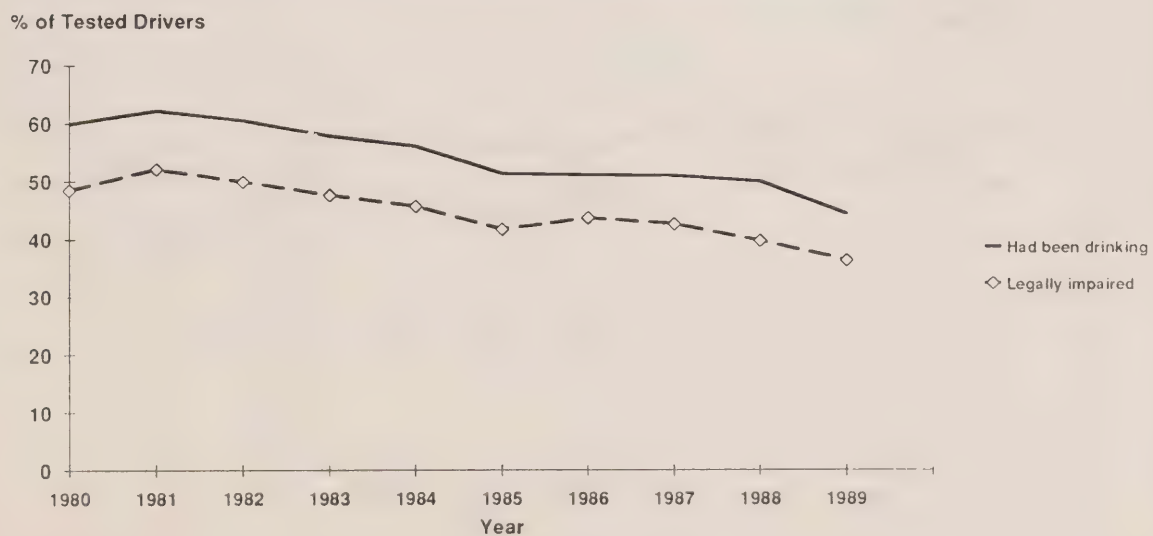


Figure 5
Percent of Fatally Injured Drivers with Illegal
Blood Alcohol Concentration by Sex: (Seven Provinces)

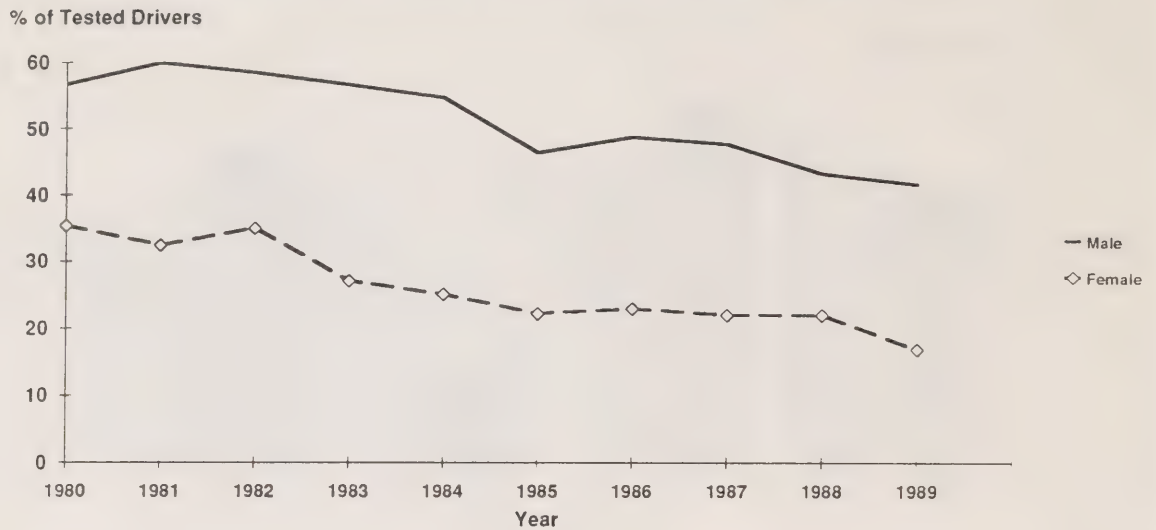


Figure 6
Percent of Fatally Injured Drivers with Illegal Blood
Alcohol Concentration by Age Group: (Seven Provinces)

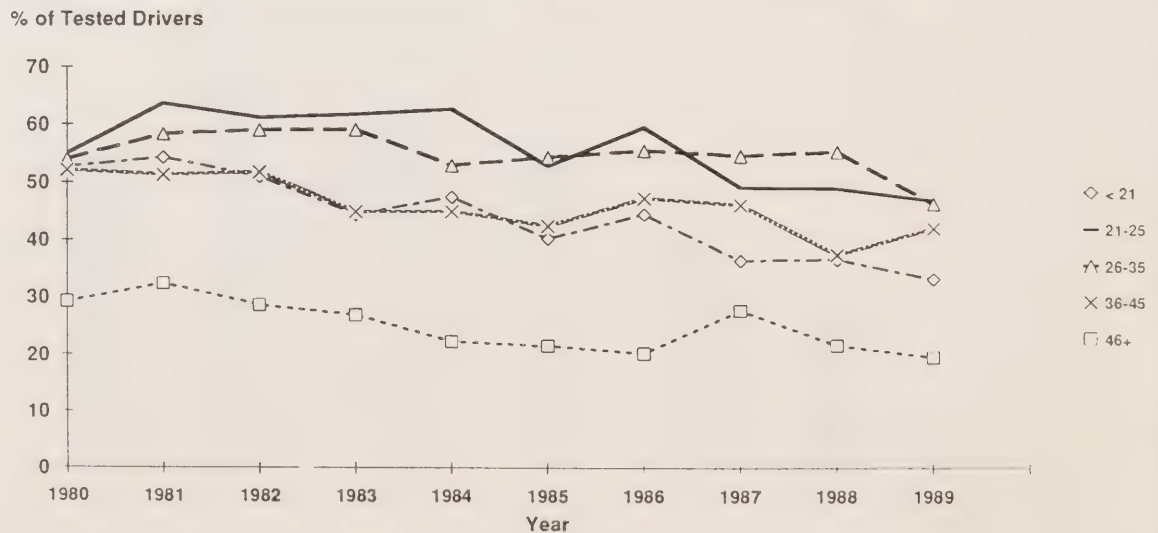
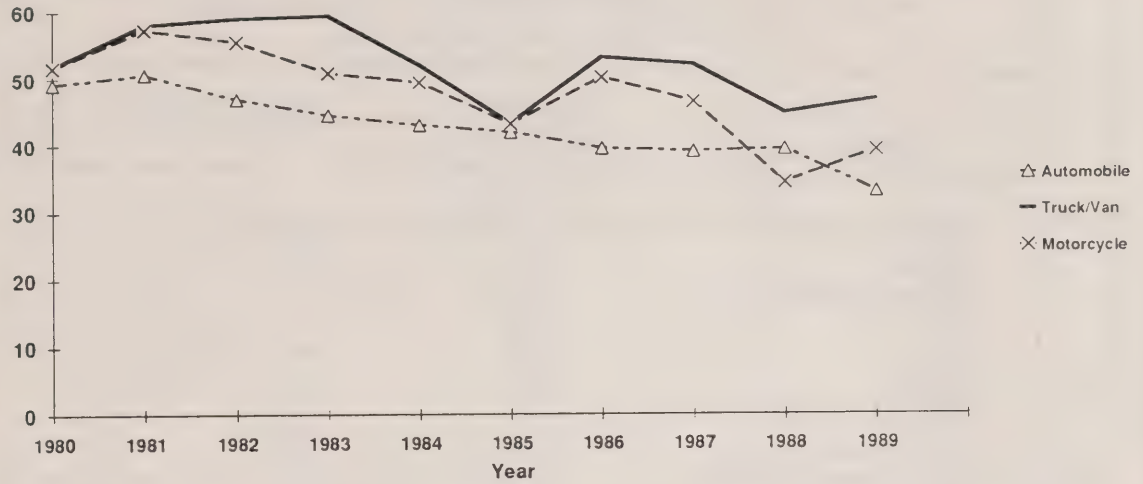


Figure 7

Percent of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Vehicle Type: (Seven Provinces)

% of Tested Drivers



APPENDIX

Corresponding Data for Figures 1-7*

Table 1			
Distribution of BAC among fatally injured drivers by province/territory: 1989 (Death within 12 months)			
Province	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
British Columbia	273	44.0	35.5
Alberta	241	43.2	39.0
Saskatchewan	104	51.0	44.2
Manitoba	72	50.0	34.7
Ontario	619	41.7	33.1
Quebec	426	52.4	45.5
New Brunswick	49	51.0	46.9
Nova Scotia	48	62.5	52.1
Prince Edward Island	5	60.0	60.0
Newfoundland	27	51.9	44.4
Yukon	4	25.0	25.0
Northwest Territories	4	75.0	50.0
TOTAL	1872	46.5	38.8

Table 2			
Distribution of BAC among fatally injured drivers by age: 1989 (Canada; death within 12 months)			
Age Group	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
< 21	291	46.1	32.0
21-25	316	58.5	49.7
26-35	515	54.8	49.7
36-45	284	48.6	41.6
46-55	157	33.1	28.7
56+	309	25.6	18.8

* e.g., Table 1 corresponds to data shown graphically in Figure 1.

Table 3

Distribution of BAC among fatally injured drivers by vehicle type:
1989 (Canada; death within 12 months)

Vehicle Type	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
Automobile	1236	44.4	36.7
Truck/Van	416	54.8	47.8
Tractor-Trailer	40	17.5	7.5
Motorcycle	177	48.0	39.6
Bus	3	33.3	33.3

Table 4

Distribution of BAC among fatally injured drivers:
1980-1989 (seven provinces; death within 6 hours)

Year	Percent of tested drivers	
	>1 mg%	>80 mg%
1980	59.9	48.5
1981	62.2	52.1
1982	60.5	49.9
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7
1986	51.0	43.6
1987	50.8	42.5
1988	49.8	39.7
1989	44.2	36.3

Table 5

Percent of fatally injured drivers with illegal BAC by sex:
1980-1989 (seven provinces; death within 6 hours)

Sex	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Male	56.6	59.9	58.4	56.5	54.5	46.2	48.5	47.4	43.0	41.4
Female	35.4	32.4	34.9	27.0	25.0	22.1	22.8	21.9	21.9	16.8

Table 6

Percent of fatally injured drivers with illegal BAC by age:
1980-1989 (seven provinces; death within 6 hours)

Age	1980	1981	1982	1983	1984	1986	1986	1987	1988	1989
< 21	52.7	54.2	50.9	44.3	47.3	40.1	44.2	36.2	36.3	33.0
21-25	54.9	63.5	61.1	61.6	62.4	52.6	59.2	48.8	48.6	46.5
26-35	54.0	58.3	59.0	59.0	52.8	54.1	55.2	54.3	55.0	46.0
36-45	52.1	51.3	51.7	44.8	44.8	42.3	47.0	45.8	37.2	41.8
46+	29.2	32.4	28.6	26.8	22.1	21.4	20.0	27.5	21.4	19.3

Table 7

Percent of fatally injured drivers with illegal BAC by vehicle type:
1980-1989 (seven provinces; death within 6 hours)

Vehicle Type	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Automobile	49.2	50.6	46.9	44.5	43.0	41.9	39.5	39.1	39.5	33.1
Van/Truck	51.8	58.0	59.0	59.3	52.0	43.2	53.1	52.1	44.8	46.8
Motorcycle	51.6	57.3	55.5	50.8	49.4	43.1	50.1	46.5	34.4	39.3

May 1990

Preliminary Fatality Statistics

During 1989, there were 4176 fatalities in Canada, an increase of 0.6% over 1988 fatalities and an increase of 0.2% compared to the average fatalities in the last three years.

During this period, motor vehicle driver and motor vehicle passenger fatalities (at 2071 and 1179) increased by 3.3% and 8.5% respectively, while pedestrian, motorcyclist and bicyclist fatalities (at 514, 247 and 95) decreased by 12.7%, 9.2% and 23.4% respectively over fatalities among the same road user classes during the same period in 1988.

1989 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	5	6	2	8	4	8	11	9	8	14	6	8	89	53.4	50.0
P.E.I.	1	2	1	1	0	2	0	8	2	0	0	1	18	-14.3	-20.6
N.S.	10	8	8	6	3	5	12	15	8	14	15	16	120	-17.8	-18.4
N.B.	13	8	10	15	11	17	12	18	13	22	4	11	154	-6.1	3.8
Que.	75	73	62	71	96	110	135	115	106	92	98	97	1130	3.7	4.1
Ont.	78	76	75	100	98	112	137	133	117	92	104	110	1232	-0.3	3.6
Man.	10	3	7	8	10	9	17	32	18	8	8	15	145	2.8	-8.2
Sask.	14	6	14	18	16	14	18	19	19	30	10	14	192	-4.0	-15.4
Alta.	25	29	24	27	34	38	52	62	49	59	37	54	490	5.6	-1.8
B.C.	44	40	33	29	37	64	64	58	57	47	52	62	587	-4.6	-4.1
Yukon	0	0	0	1	0	0	2	3	2	0	0	0	8	-33.3	-40.0
N.W.T.	0	1	1	0	2	3	2	0	0	0	1	1	11	175.0	32.0
Canada	275	252	237	284	311	382	462	472	399	378	335	389	4176	0.6	0.2

1989 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for 1989.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	123	100	43	2	1	6	275
February	132	70	36	2	1	11	252
March	122	69	37	2	2	5	237
April	146	65	42	8	22	1	284
May	149	82	34	14	27	5	311
June	177	110	33	14	43	5	382
July	236	104	41	17	54	10	462
August	222	136	48	13	46	7	472
September	202	102	45	14	34	2	399
October	189	105	63	5	14	2	378
November	189	96	39	3	3	5	335
December	184	140	53	1	0	11	389
Total	2071	1179	514	95	247	70	4176

Fatality Trends By Road User Class and Province/Territory – 1988 –1989

The following table presents comparisons of fatality estimates by road user class and province/territory for 1988 and 1989. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change
NFLD	26	33	26.9%	21	35	66.7%	4	12	200.0%	1	2	100.0%	4	6	50.0%
P.E.I.	8	6	-25.0%	2	3	50.0%	5	4	-20.0%	0	1	-	2	2	0.0%
N.S.	80	70	-12.5%	38	34	-10.5%	15	9	-40.0%	4	1	-75.0%	9	6	-33.3%
N.B.	73	73	0.0%	51	49	-3.9%	18	18	0.0%	4	3	-25.0%	14	7	-50.0%
QUE	564	587	4.1%	245	254	3.7%	171	144	-15.8%	34	37	8.8%	62	89	43.5%
ONT.	561	596	6.2%	353	354	0.3%	187	155	-17.1%	43	31	-27.9%	91	87	-4.4%
MAN.	65	62	-4.6%	34	53	55.9%	28	18	-35.7%	5	1	-80.0%	9	9	0.0%
SASK.	100	112	12.0%	62	52	-16.1%	20	15	-25.0%	2	4	100.0%	3	3	0.0%
ALTA	238	256	7.6%	122	151	23.8%	50	59	18.0%	6	5	-16.7%	31	10	-67.7%
B.C.	278	266	-4.3%	156	189	21.2%	90	76	-15.6%	25	10	-60.0%	47	28	-40.4%
YUK.	8	4	-50.0%	3	3	0.0%	1	1	-	0	0	-	0	0	-
N.W.T.	4	6	50.0%	0	2	-	0	3	-	0	0	-	0	0	-
CANADA	2005	2071	3.3%	1087	1179	8.5%	589	514	-12.7%	124	95	-23.4%	272	247	-9.2%

National Trend in Monthly Fatalities

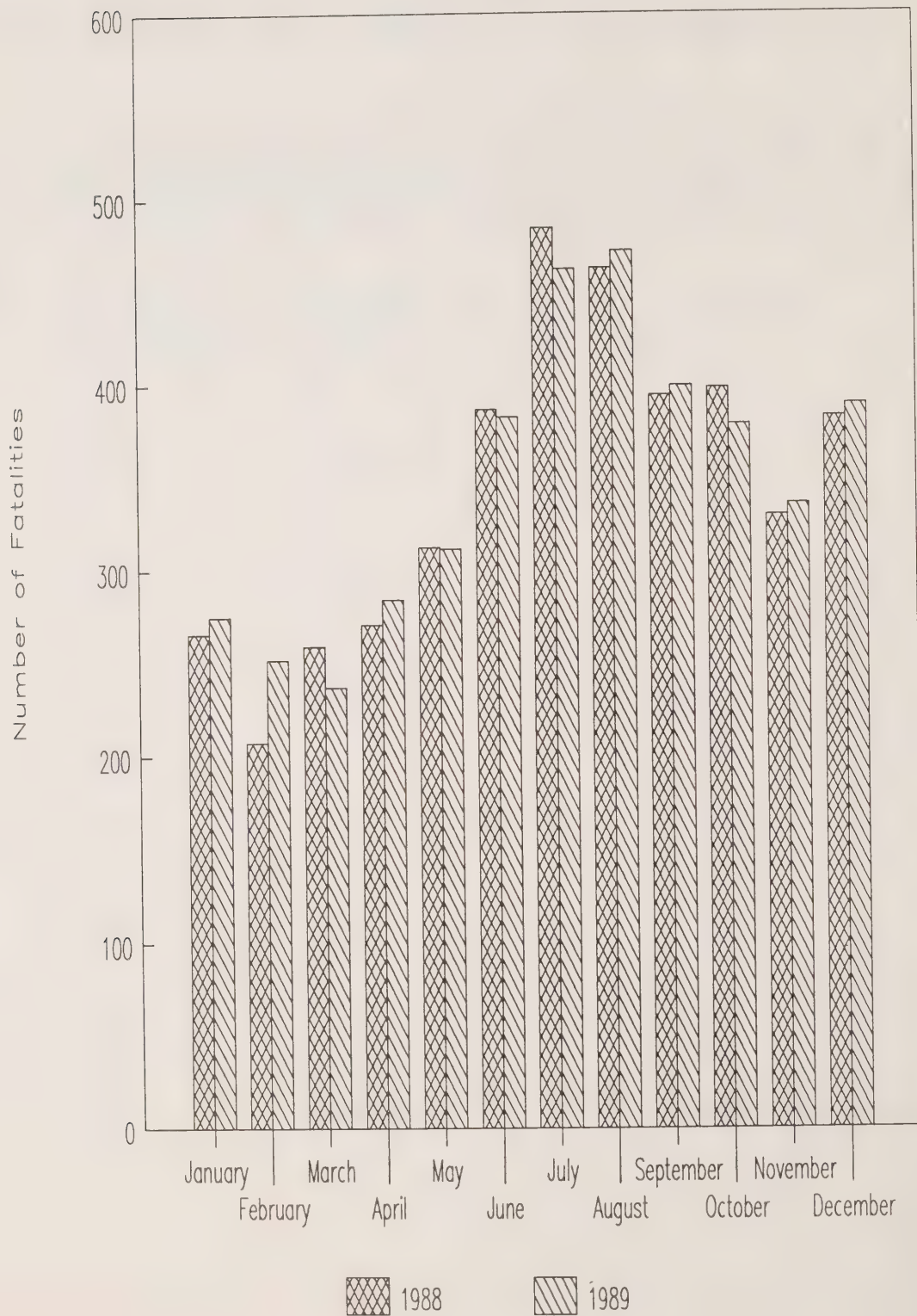
January 1988 – December 1989

The following table and graph summarize fatalities for the last 12-month period (January 1989 – December 1989) and compare these data with statistics for the corresponding period of the previous year.

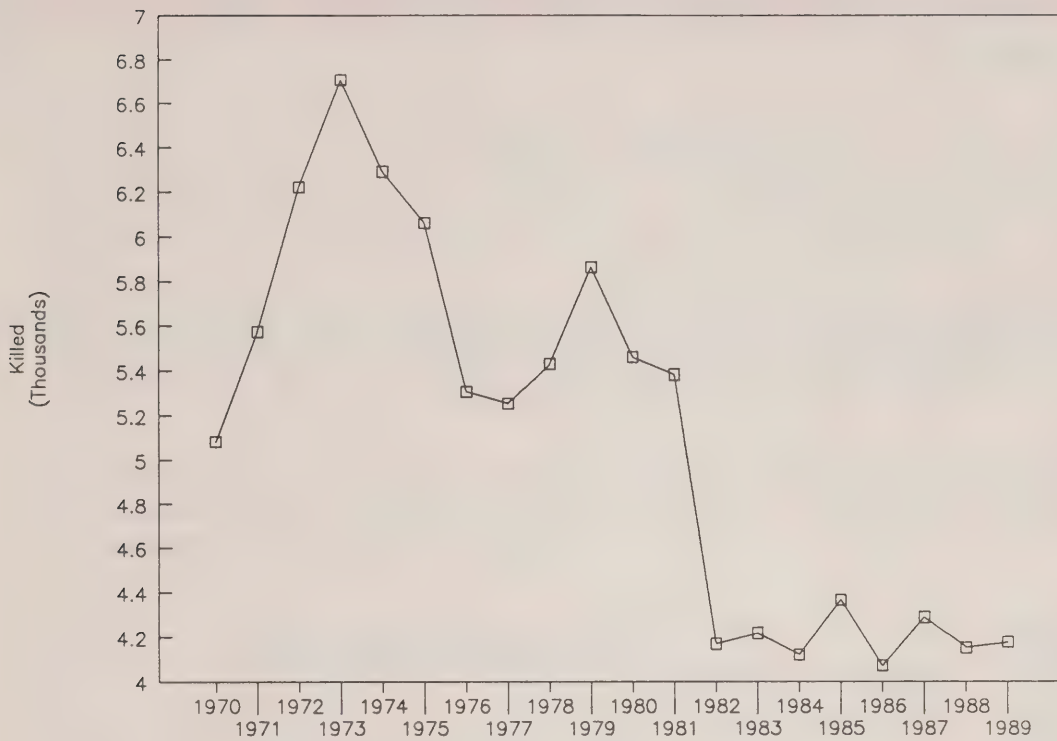
Month	Fatalities	Fatalities	% Change
	1988	1989	1989/1988
January	266	275	3.4%
February	207	252	21.7%
March	259	237	-8.5%
April	271	284	4.8%
May	312	311	-0.3%
June	386	382	-1.0%
July	484	462	-4.5%
August	463	472	1.9%
September	394	399	1.3%
October	398	378	-5.0%
November	329	335	1.8%
December	382	389	1.8%
12 Month Total	4151	4176	0.6%

PERSONS KILLED IN TRAFFIC ACCIDENTS

IN CANADA

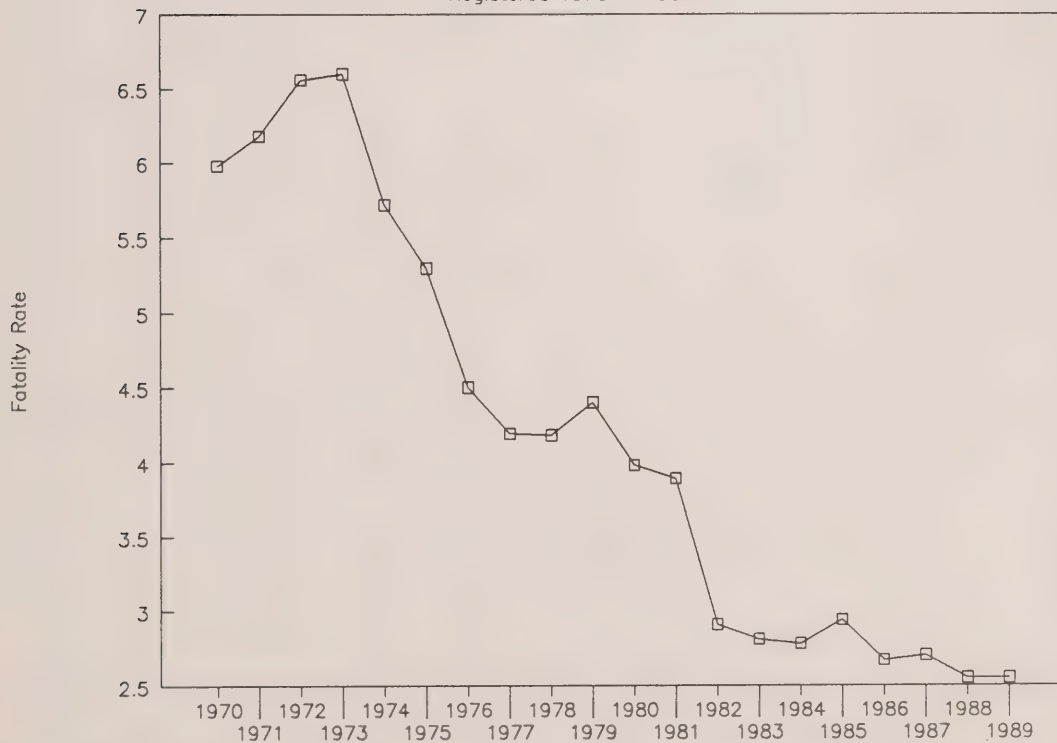


Road Fatalities 1970 - 1989



Fatality Rate / 10,000 Motor Vehicles

Registered 1970 - 1989



LEAFLET

TP 2436

FEUILLET

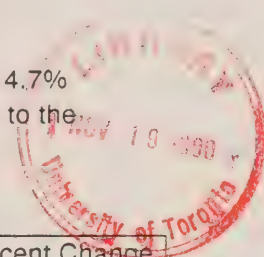
November 1990

Preliminary Fatality Statistics

During the first six months of 1990, there were 1674 fatalities in Canada, a decrease of 4.7% over the number of traffic deaths recorded during the same period last year, and a decrease of 4.1% compared to the average fatalities for this period in the last three years.

During this period, motor vehicle driver, motor vehicle passenger and motorcyclist fatalities (at 803, 450 and 95) decreased by 6.6%, 9.6% and 1.0% respectively while pedestrian fatalities (at 269) increased by 18.0% and bicyclist fatalities (at 43) remained unchanged when compared to fatalities among the same road user classes during the same period in 1989.

The projected traffic fatality total for Canada in 1990 is 4048. This total represents a 4.7% decrease over annual road accident deaths in 1989 and a 4.3% decrease compared to the average fatalities during the last three years.



1990 Preliminary Fatality Statistics									Percent Change	
	Jan	Feb	Mar	Apr	May	June	Cumulative Total	Annual Projection	Last Year	Last 3 Years
Nfld.	6	6	5	3	1	6	27	71	-18.2	3.8
P.E.I.	2	1	2	2	1	1	9	29	28.6	50.0
N.S.	15	5	3	9	7	9	48	131	20.0	-8.3
N.B.	20	8	5	6	6	9	54	128	-27.0	-18.2
Que.	61	53	86	70	85	138	493	1186	0.4	6.4
Ont.	81	70	56	75	94	88	464	1119	-15.5	-10.5
Man.	7	2	14	3	4	10	40	108	-18.4	-28.6
Sask.	8	12	10	5	15	16	66	153	-19.5	-26.9
Alta.	33	30	33	24	33	28	181	445	2.3	-8.6
B.C.	40	53	37	45	56	58	289	671	17.0	10.3
Yukon	0	0	0	0	0	1	1	4	0.0	-57.1
N.W.T.	1	0	0	1	0	0	2	3	-71.4	-62.5
Canada	274	240	251	243	302	364	1674	4048	-4.7	-4.3

1990 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first six months of 1990.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	129	77	64	1	1	2	274
February	118	79	37	1	1	4	240
March	127	69	43	4	7	1	251
April	128	60	35	7	11	2	243
May	136	70	45	11	36	4	302
June	165	95	45	19	39	1	364
Total	803	450	269	43	95	14	1674

Fatality Trends By Road User Class and Province/Territory – 1989 –1990

The following table presents comparisons of fatalities by road user class and province/territory for the first six months of 1989 and 1990. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change
NFLD	10	12	20.0%	12	4	-66.7%	6	9	50.0%	2	0	-100.0%	2	2	0.0%
P.E.I.	2	4	100.0%	2	2	0.0%	1	3	200.0%	1	0	-	0	0	-
N.S.	23	24	4.3%	11	13	18.2%	4	8	100.0%	1	1	0.0%	1	2	100.0%
N.B.	36	23	-36.1%	22	16	-27.3%	10	13	30.0%	0	0	-	4	2	-50.0%
QUE.	253	242	-4.3%	107	111	3.7%	63	76	20.6%	16	16	0.0%	36	37	2.8%
ONT.	259	228	-12.0%	161	127	-21.1%	79	70	-11.4%	13	13	0.0%	34	26	-23.5%
MAN.	23	17	-26.1%	18	14	-22.2%	6	6	0.0%	1	1	0.0%	1	2	100.0%
SASK.	52	33	-36.5%	21	22	4.8%	6	7	16.7%	1	2	100.0%	1	2	100.0%
ALTA	94	92	-2.1%	56	53	-5.4%	19	24	26.3%	0	4	-	7	7	0.0%
B.C.	104	126	21.2%	87	88	1.1%	31	53	71.0%	8	6	-25.0%	10	14	40.0%
YUK.	0	0	-	0	0	-	1	0	-	0	0	-	0	1	-
N.W.T.	4	2	-50.0%	1	0	-	2	0	-	0	0	-	0	0	-
CANADA	860	803	-6.6%	498	450	-9.6%	228	269	18.0%	43	43	0.0%	96	95	-1.0%

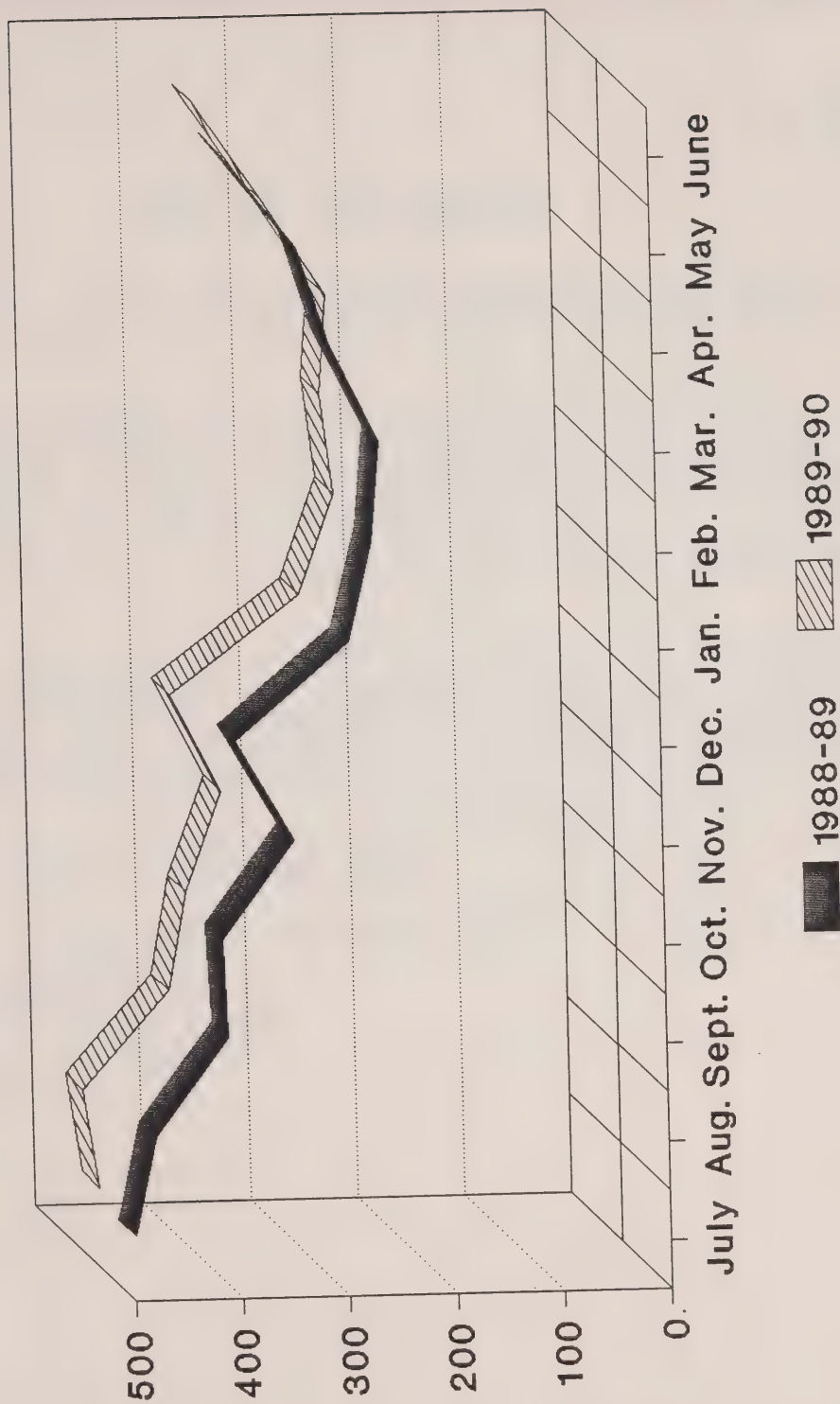
National Trend in Monthly Fatalities

July 1988 – June 1990

The following table and graph summarize fatalities for the last 12-month period (July 1989 – June 1990) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1988	1989	1989/1988
July	484	471	-2.7%
August	463	484	4.5%
September	394	403	2.3%
October	398	385	-3.3%
November	329	350	6.4%
December	382	396	3.7%
	1989	1990	1990/1989
January	275	274	-0.4%
February	251	240	-4.4%
March	242	251	3.7%
April	287	243	-15.3%
May	315	302	-4.1%
June	387	364	-5.9%
Jan. – June Total	1757	1674	-4.7%
12 Month Total	4207	4163	-1.0%

Persons Killed in Traffic Accidents In Canada 1988-89 / 1989-90



December, 1990

TIRES AND WINTER DRIVING

Transport Canada and the Rubber Association of Canada are again advising motorists to think about safe driving and tires this winter.

Vehicle handling will be improved by ensuring that identical all season or winter tires are installed on all wheels of front and rear drive passenger vehicles, including four wheel drive models. Under severe conditions the use of four winter tires is recommended.

Mixing different tire types such as radial and bias tires must be avoided.

Proper air pressure extends tire tread life, improves safety, and reduces fuel consumption; all vital factors in saving energy and protecting the environment. Tire pressure decreases as temperatures drop so be sure to check the pressures at least once a month when the tires are cold preferably after the car has sat out all night.

More information on tire safety is contained in the pamphlet "Riding on Air" which is available from:

The Road Safety and Motor Vehicle Regulation
Directorate,
Transport Canada,
344 Slater Street,
Ottawa, Ontario.
K1A 0N5

Contact: R.J. (John) Neufeld
Road Safety, Ottawa
(613) 998-1959

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**ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE
ACCIDENTS: 1990 AND THE PAST TEN YEARS**

Background:

This leaflet provides information on blood alcohol concentration (BAC) determined for drivers fatally injured in motor vehicle accidents in the Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹, which consists of data collected from provincial coroners' or medical examiners' reports and reports prepared by investigating police officers. These data are supplied by provincial agencies.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). In 1985, Nova Scotia was added to the database followed by Newfoundland in 1986. In 1987, similar data from Quebec and the two territories became available, making the fatality database representative of all the provinces and territories.

In reporting the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

1. The percentages expressed are the percent of drivers tested for blood alcohol concentration. About 80.5% of fatally injured drivers across Canada were tested for alcohol use in 1990, compared to 78.5% in 1989.
 2. The 1990 and comparative 1989 results include data from all provinces and territories in Canada and are based on victims dying within twelve months of the accident. The ten-year results (1981-1990) are based on data from the original seven provinces and include victims whose death occurred within six hours after the accident, a convention established in previous years.
-
1. The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

3. The data include only fatally injured drivers of the principal types of motorized vehicles on public roadways, i.e., automobiles, non-articulated trucks/vans, motorcycles, tractor-trailers. There were no fatally injured bus drivers in the 1990 data. Excluded are snowmobiles, other off-road vehicles, bicyclists, pedestrians and passengers.
4. BACs are reported in milligrams per 100 milliliters of blood, (e.g., .08 = 80 mg% BAC). The percentage of drivers which had been drinking prior to the accident (BAC greater than 1 mg%) and the percentage which were legally impaired (BAC exceeding 80 mg%) are shown separately in the following figures. For clarity, Figures 5 to 7 show only the percent legally impaired.

1990 Characteristics:

In 1990, 1756 out of 2181 fatally injured drivers were tested for level of alcohol in the blood. Among tested drivers, 45.4% had been drinking, a decrease from 46.5% in 1989; 36.6% of tested drivers were legally impaired, a decrease from 38.8% in 1989.

Figures 1 to 3 present data from all of the provinces and the two territories for 1990. Figure 1 shows the percent of fatally injured drivers who had been drinking and the percent legally impaired for each province. (For the Yukon and Northwest Territories, see Table 1 of the Appendix.) Although there appears to be considerable variation among provinces, it must be emphasized that the percentages for the smaller provinces are less reliable (i.e., more subject to chance variation) than those for larger provinces. In addition, the range of testing was from 67.9% for Quebec to 92.7% for British Columbia. Percentages based on lower rates of testing should be interpreted with caution because there is a possibility of selection bias, i.e., drivers suspected of impairment may be more likely to have been tested.

Of the 1756 drivers tested, 80.5% were male and 19.5% were female. Among males, 49.6% had been drinking compared to 28.0% of the females. The corresponding rates of illegal impairment were 40.6% for males and 20.1% for females (figure not provided). Figure 2 shows that among different age groups, the highest proportion of alcohol impairment occurred among 26-35 year olds (48.7%) and then steadily declined after age 35. Examination of BAC by vehicle type (Figure 3) reveals that truck/van (excluding tractor-trailer) drivers had the highest rate of alcohol impairment, followed by motorcycle drivers and automobile drivers. Alcohol use was considerably higher among fatally injured motorcycle drivers and truck/van drivers than automobile drivers.

Trends During the Past Ten Years:

Figures 4 to 7 present data for the ten-year period, 1981 to 1990. To maintain consistency from year to year, only data from the original seven provinces have been aggregated. Findings are based on victims whose death occurred within six hours after the accident.

Figure 4 shows that the general downward trend from 1981 continued in 1990. In that year, the percentage of drivers who had been drinking (41.7%) and the percentage of drivers who were legally impaired (34.6%) was lower than that of any previous year.

Figure 5 shows that over the ten-year period, female drivers killed are consistently less likely to be impaired by alcohol than are males. In 1990, alcohol impairment among males (38.7%) declined while impairment among females rose to 18.4% from the 1989 level.

Figure 6 shows that the overall downward trend is not exhibited equally by all age groups. The age groups under 25 years showed the largest decreases over ten years, and the downward trend continued in 1990. The 26-35 years group showed little change over time until 1989 where the percentage impaired decreased by 9% from 1988. A further decrease of 1.2% occurred in 1990. The downward trend exhibited by the 36-45 years group continued very slightly in 1990, while the rate for the 46 and over group increased slightly.

Figure 7 demonstrates that over the ten-year period, fatally injured drivers of trucks/vans (excluding tractor-trailers) had the highest rate of impairment, followed by motorcycle drivers. The rate for van/truck drivers (45.0%) declined in 1990 and the rate for motorcycle drivers increased dramatically from 39.3% to 44.7%, an increase of 5.4%. The declining trend for automobile drivers continued in 1990 with a rate of 30.5%. Tractor-trailers are not included in Figure 7 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Canada Building
Tower 2, 13th Floor
344 Slater Street
Ottawa, Ontario
K1A 0N5.

Figure 1
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers by Province: 1990

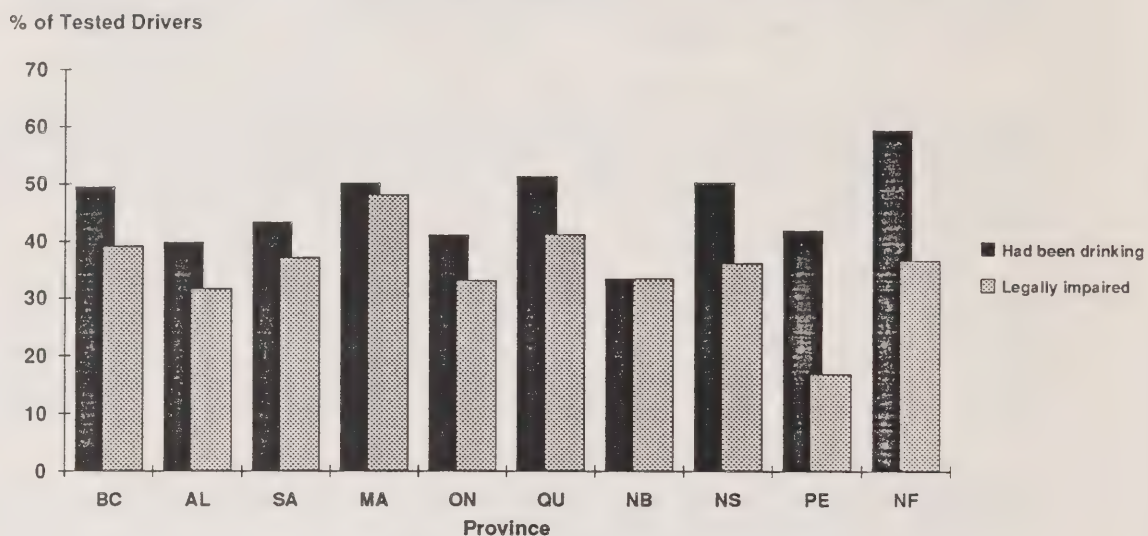


Figure 2
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers by Age: 1990 (Canada)

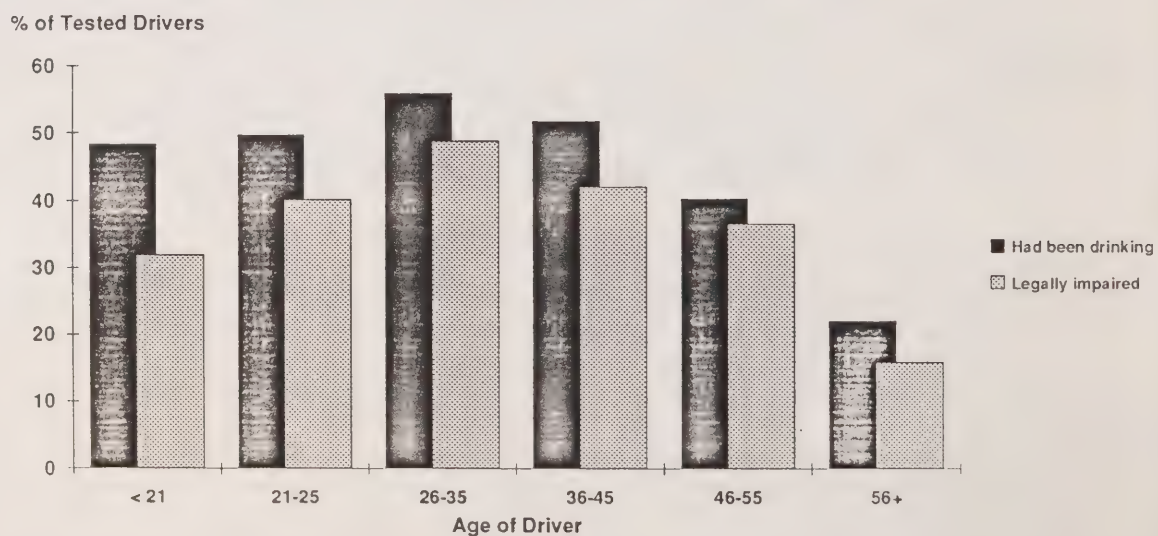


Figure 3
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type: 1990 (Canada)

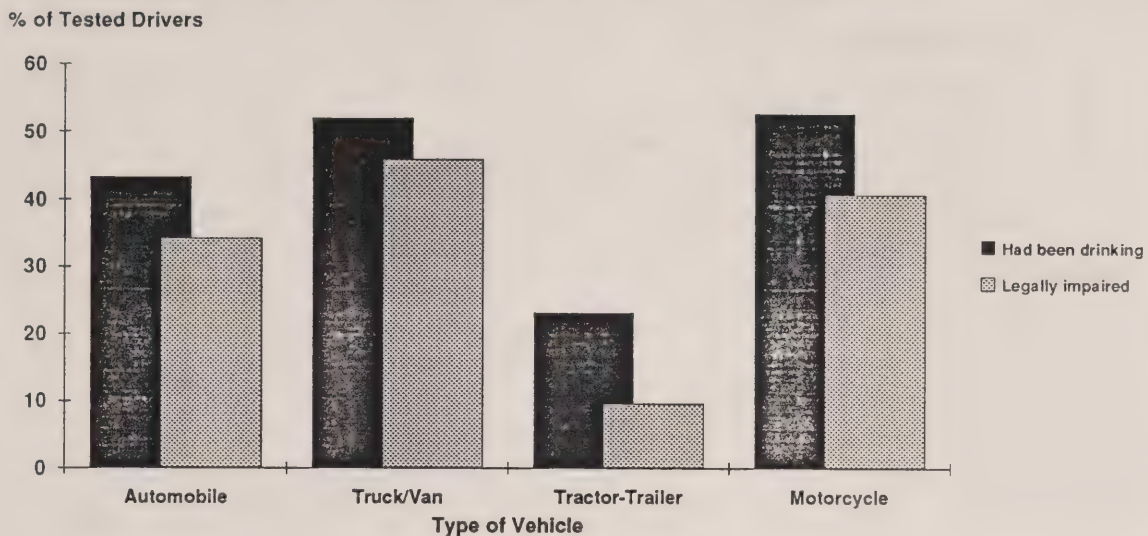


Figure 4
Distribution of Blood Alcohol Concentration
Among Fatally Injured Drivers: (Seven Provinces)

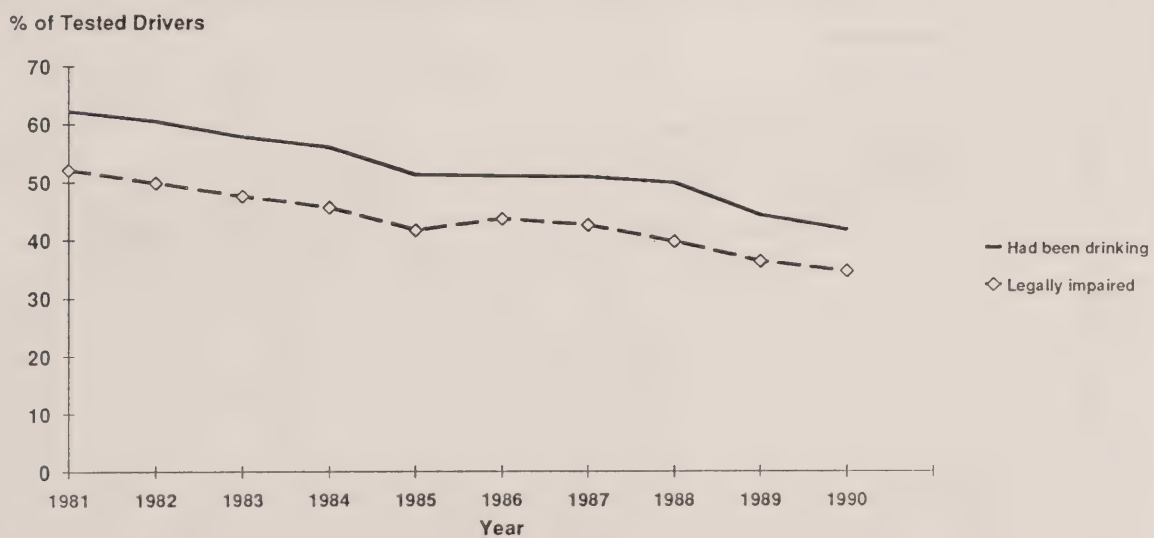


Figure 5
Percent of Fatally Injured Drivers with Illegal
Blood Alcohol Concentration by Sex: (Seven Provinces)



Figure 6
Percent of Fatally Injured Drivers with Illegal Blood
Alcohol Concentration by Age Group: (Seven Provinces)

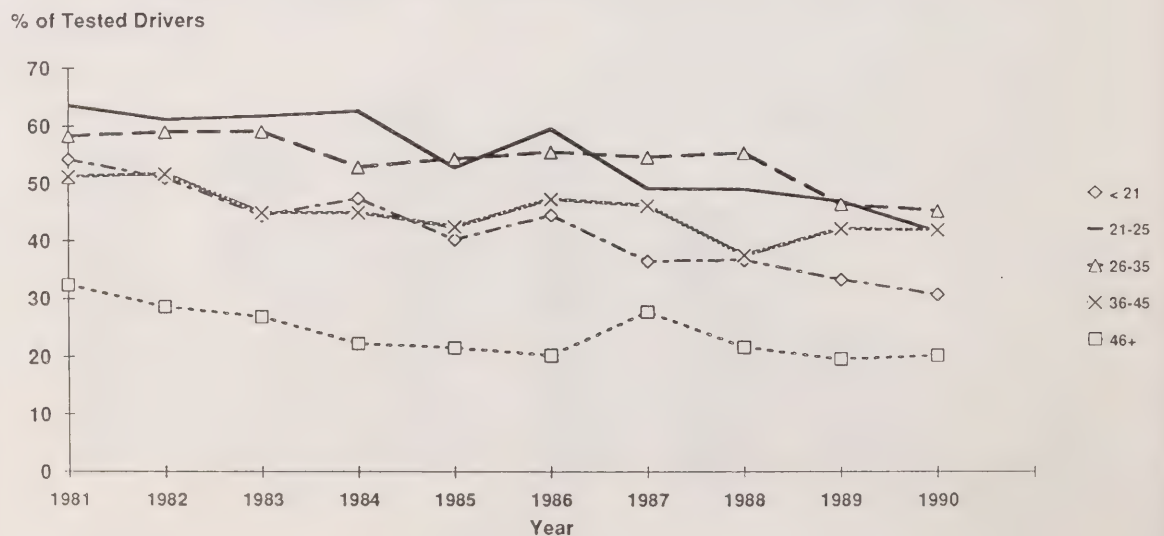


Figure 7
Percent of Fatally Injured Drivers with Illegal Blood
Alcohol Concentration by Vehicle Type: (Seven Provinces)



APPENDIX

Corresponding Data for Figures 1-7*

<p style="text-align: center;">Table 1</p> <p style="text-align: center;">Distribution of BAC among fatally injured drivers by province/territory: 1990 (Death within 12 months)</p>			
Province	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
British Columbia	317	49.5	39.1
Alberta	209	39.7	31.6
Saskatchewan	81	43.2	37.0
Manitoba	50	50.0	48.0
Ontario	521	40.9	33.0
Quebec	395	51.1	41.0
New Brunswick	78	33.3	33.3
Nova Scotia	64	50.0	35.9
Prince Edward Island	12	41.7	16.7
Newfoundland	22	59.1	36.4
Yukon	6	83.3	66.7
Northwest Territories	1	100.0	100.0
TOTAL	1756	45.4	36.6

<p style="text-align: center;">Table 2</p> <p style="text-align: center;">Distribution of BAC among fatally injured drivers by age: 1990 (Canada; death within 12 months)</p>			
Age Group	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
< 21	254	48.4	31.9
21-25	282	49.7	40.1
26-35	448	55.8	48.7
36-45	291	51.6	41.9
46-55	157	40.1	36.3
56+	324	21.9	15.7

* e.g., Table 1 corresponds to data shown graphically in Figure 1.

Table 3

Distribution of BAC among fatally injured drivers by vehicle type:
1990 (Canada; death within 12 months)

Vehicle Type	Number of drivers tested	Percent of tested drivers	
		>1 mg%	>80 mg%
Automobile	1169	43.3	34.2
Truck/Van	366	51.9	45.9
Tractor-Trailer	52	23.1	9.6
Motorcycle	169	52.7	40.8

Table 4

Distribution of BAC among fatally injured drivers:
1981-1990 (seven provinces; death within 6 hours)

Year	Percent of tested drivers	
	>1 mg%	>80 mg%
1981	62.2	52.1
1982	60.5	49.9
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7
1986	51.0	43.6
1987	50.8	42.5
1988	49.8	39.7
1989	44.2	36.3
1990	41.7	34.6

Table 5

Percent of fatally injured drivers with illegal BAC by sex:
1981-1990 (seven provinces; death within 6 hours)

Sex	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Male	59.9	58.4	56.5	54.5	46.2	48.5	47.4	43.0	41.4	38.7
Female	32.4	34.9	27.0	25.0	22.1	22.8	21.9	21.9	16.8	18.4

Table 6

Percent of fatally injured drivers with illegal BAC by age:
1981-1990 (seven provinces; death within 6 hours)

Age	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
< 21	54.2	50.9	44.3	47.3	40.1	44.2	36.2	36.3	33.0	30.4
21-25	63.5	61.1	61.6	62.4	52.6	59.2	48.8	48.6	46.5	41.2
26-35	58.3	59.0	59.0	52.8	54.1	55.2	54.3	55.0	46.0	44.8
36-45	51.3	51.7	44.8	44.8	42.3	47.0	45.8	37.2	41.8	41.5
46+	32.4	28.6	26.8	22.1	21.4	20.0	27.5	21.4	19.3	19.9

Table 7

Percent of fatally injured drivers with illegal BAC by vehicle type:
1981-1990 (seven provinces; death within 6 hours)

Vehicle Type	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Automobile	50.6	46.9	44.5	43.0	41.9	39.5	39.1	39.5	33.1	30.5
Van/Truck	58.0	59.0	59.3	52.0	43.2	53.1	52.1	44.8	46.8	45.0
Motorcycle	57.3	55.5	50.8	49.4	43.1	50.1	46.5	34.4	39.3	44.7

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TP 2436

FEUILLET

January 1991

Table 1

Estimates of Shoulder Seat Belt Use From Annual Surveys 1980-1990

% of Car Drivers Wearing Shoulder Belts, Where Available*

Prov.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Nfld	2.8	8.6	67.8	75.9	69.7	65.5	61.4	64.6	72.4	64.6	84.2
PEI	6.2	3.4	7.2	5.6	9.3	17.9	13.7	50.0	82.0	72.7	65.2
NS	9.3	11.4	8.7	12.1	20.2	80.8	79.8	68.6	73.4	79.1	83.4
NB	5.6	8.1	4.2	66.5	60.2	63.4	66.5	65.0	67.6	64.4	76.9
Que.	39.0	40.7	67.5	60.4	54.3	53.4	67.7	85.8	81.5	81.6	93.5
Ont.	43.7	52.5	48.9	60.1	61.9	66.4	65.9	67.6	70.3	70.8	71.6
Man.	6.0	6.4	7.0	11.1	61.6	53.6	61.3	64.6	66.0	79.3	73.4
Sask.	60.7	50.5	48.4	54.0	49.6	51.1	59.7	71.9	81.0	87.7	91.5
Alb.	12.7	11.0	17.1	18.2	19.8	24.4	27.8	74.3	82.5	44.6	88.1
BC	49.3	42.4	53.0	67.4	72.7	73.8	78.3	80.4	79.8	85.2	88.3
Canada	36.4	38.1	45.6	52.0	54.9	58.4	63.2	74.0	75.8	73.9	81.9

* Shoulder-belt fitting: 1980 = 95.0% 1986 = 98.7%
1981 = 97.4% 1987 = 98.7%
1982 = 96.8% 1988 = 98.6%
1983 = 96.8% 1989 = 99.1%
1984 = 98.0% 1990 = 99.6%
1985 = 97.9%



Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle in 1990

Province	Passenger Cars	Passenger Vans	Light Trucks	Total
Newfoundland	84.2	84.7	81.4	83.8
Prince Edward Island	65.2	62.5	37.1	61.5
Nova Scotia	83.4	82.6	67.7	81.6
New Brunswick	76.9	69.1	57.3	73.4
Quebec	93.5	89.7	90.0	93.0
Ontario	71.6	63.4	51.5	69.2
Manitoba	73.4	73.0	47.4	69.5
Saskatchewan	91.5	89.8	84.3	90.4
Alberta	88.1	84.7	73.2	85.5
British Columbia	88.3	83.0	73.4	85.9
Canada	81.9	77.7	67.6	80.0

Table 3

Estimates of Shoulder Seat Belt Use by Road Types in 1990

% of Car Drivers Wearing Shoulder Belts

Province	Urban	Rural*	Total
Newfoundland	84.2	89.7	84.6
Prince Edward Island	65.2	58.3	63.7
Nova Scotia	83.4	91.5	84.3
New Brunswick	76.9	84.1	78.3
Quebec	93.5	92.0	93.4
Ontario	71.6	73.2	71.7
Manitoba	73.4	84.0	74.0
Saskatchewan	91.5	88.3	91.2
Alberta	88.1	78.2	87.5
British Columbia	88.3	78.5	87.7
Canada	81.9	80.8	81.8

* Inter city highways or country roads

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 22 to October 28, 1990.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased to a record 81.9 percent in 1990 from 73.9 percent in 1989 (see Table 1).

Highlights of the results of the survey of passenger vehicle drivers for individual provinces were as follows (in rounded percentages):

- Quebec's 93 percent rate is the highest ever achieved by a province, up significantly from 82 percent last year. Saskatchewan's 91 percent rate is up from 88 percent, the country's highest in 1989. The rate achieved by the two provinces is by far the greatest level ever reached in North America and ranks them among world leaders in seat belt usage.
- British Columbia's 88 percent rate is up three percent. Alberta's rate almost doubled -- to 88 percent from 45 percent last year -- following the reinstatement of the province's seat belt law.
- Newfoundland's rate improved to 84 percent from 65 percent last year and Nova Scotia's rate increased to 83 percent from 79 percent. New Brunswick's 77 percent rate is an increase of 13 percent over last year.
- Manitoba followed with 73 percent, down from 79 percent last year, Ontario's 72 percent rate was essentially unchanged, and Prince Edward Island's 65 percent rate was down eight percent from 73 percent in 1989.

For the first time we have two provinces where seat belt use is more than 90 percent and two more where use rates are in the high-80's. They show the results of concerted efforts in the areas of safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 78 percent in passenger vans and 68 percent in light trucks from 65 percent and 52 percent respectively last year. Seat belt use by passenger van drivers varied from 63 percent in P.E.I. to 90 percent in Saskatchewan and Quebec; use by drivers of light trucks varied from 37 percent in P.E.I. to 90 percent in Quebec. These two categories of vehicles accounted for 24 percent of the vehicles included in the survey.

Survey Method

The survey was undertaken by observers at 178 urban sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. In addition to these 178 sites, the survey was also undertaken at 22 rural sites (on highways or country roads), and the results from these sites are summarized separately in Table 3. A weighted combined estimate based on all 200 sites is also presented, for which the traffic counts on urban and rural sites are used as weights. The observation techniques in the survey were identical to those of the 1981 to 1989 surveys, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, weather conditions, type of vehicle, driver's sex and age group.

For further information write to:

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Transport
Canada

Transports
Canada

CL 9102(e)

Road Safety

Sécurité routière

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TP 2436

FEUILLET

March 1991

Preliminary Fatality Statistics

During 1990, there were 3936 fatalities in Canada, a decrease of 7.3% over 1989 fatalities and a decrease of 6.8% compared to the average fatalities in the last three years.

During this period, motor vehicle driver, motor vehicle passenger and motorcyclist fatalities (at 1880, 1080 and 254) decreased by 10.7%, 8.3% and 1.6% respectively, while pedestrian and bicyclist fatalities (at 572 and 104) increased by 8.7% and 6.1% respectively over fatalities among the same road user classes during the same period in 1989.

1990 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	6	6	5	3	1	6	9	6	3	7	3	8	63	-29.2	-8.3
P.E.I.	2	1	2	2	1	1	3	3	4	3	5	2	29	61.1	52.6
N.S.	15	5	3	9	7	9	23	9	18	25	11	16	150	25.0	5.4
N.B.	20	8	5	7	6	9	23	19	13	13	17	15	155	0.6	-0.9
Que.	61	53	86	70	86	139	128	100	102	91	73	91	1080	-5.2	-3.1
Ont.	85	73	57	78	95	94	135	136	116	107	70	74	1120	-12.9	-10.4
Man.	7	2	14	3	4	10	12	19	16	9	4	8	108	-30.3	-28.3
Sask.	8	12	10	5	15	16	15	16	16	21	15	5	154	-19.8	-26.4
Alta.	32	30	33	24	36	28	41	46	42	30	32	33	407	-16.4	-16.4
B.C.	40	54	37	45	56	58	63	81	60	53	75	32	654	11.4	7.6
Yukon	0	0	0	1	0	1	2	1	1	1	1	0	8	0.0	-22.6
N.W.T.	1	0	0	1	0	0	2	0	0	3	0	1	8	-27.3	0.0
Canada	277	244	252	248	307	371	456	436	391	363	306	285	3936	-7.3	-6.8

1990 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for 1990.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	131	76	66	1	1	2	277
February	121	80	37	1	1	4	244
March	128	69	43	4	7	1	252
April	130	62	34	8	12	2	248
May	136	74	45	11	37	4	307
June	167	96	48	20	39	1	371
July	207	131	44	17	52	5	456
August	201	118	46	18	46	7	436
September	195	95	42	16	35	8	391
October	173	98	68	2	21	1	363
November	165	81	48	5	1	6	306
December	126	100	51	1	2	5	285
Total	1880	1080	572	104	254	46	3936

Fatality Trends By Road User Class and Province/Territory – 1989 –1990

The following table presents comparisons of fatality estimates by road user class and province/territory for 1989 and 1990. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change
NFLD	33	24	-27.3%	35	18	-48.6%	12	14	16.7%	2	0	-100.0%	6	7	16.7%
P.E.I.	11	13	18.2%	1	7	600.0%	4	7	75.0%	0	0	-	2	2	0.0%
N.S.	68	66	-2.9%	33	54	63.6%	9	21	133.3%	1	2	100.0%	8	6	-25.0%
N.B.	72	79	9.7%	35	38	8.6%	18	30	66.7%	3	3	0.0%	8	5	-37.5%
QUE.	588	527	-10.4%	256	226	-11.7%	148	174	17.6%	39	43	10.3%	89	89	0.0%
ONT.	627	546	-12.9%	373	321	-13.9%	161	151	-6.2%	33	28	-15.2%	86	73	-15.1%
MAN.	71	47	-33.8%	55	37	-32.7%	19	12	-36.8%	1	3	200.0%	9	5	-44.4%
SASK.	107	83	-22.4%	50	49	-2.0%	15	10	-33.3%	4	4	0.0%	9	5	-44.4%
ALTA	255	200	-21.6%	149	128	-14.1%	59	45	-23.7%	5	10	100.0%	10	15	50.0%
B.C.	264	287	8.7%	188	198	5.3%	77	107	39.0%	10	11	10.0%	31	45	45.2%
YUK.	4	4	0.0%	1	1	0.0%	1	1	-	0	0	-	0	2	-
N.W.T.	6	4	-33.3%	2	3	-	3	0	-	0	0	-	0	0	-
CANADA	2106	1880	-10.7%	1178	1080	-8.3%	526	572	8.7%	98	104	6.1%	258	254	-1.6%

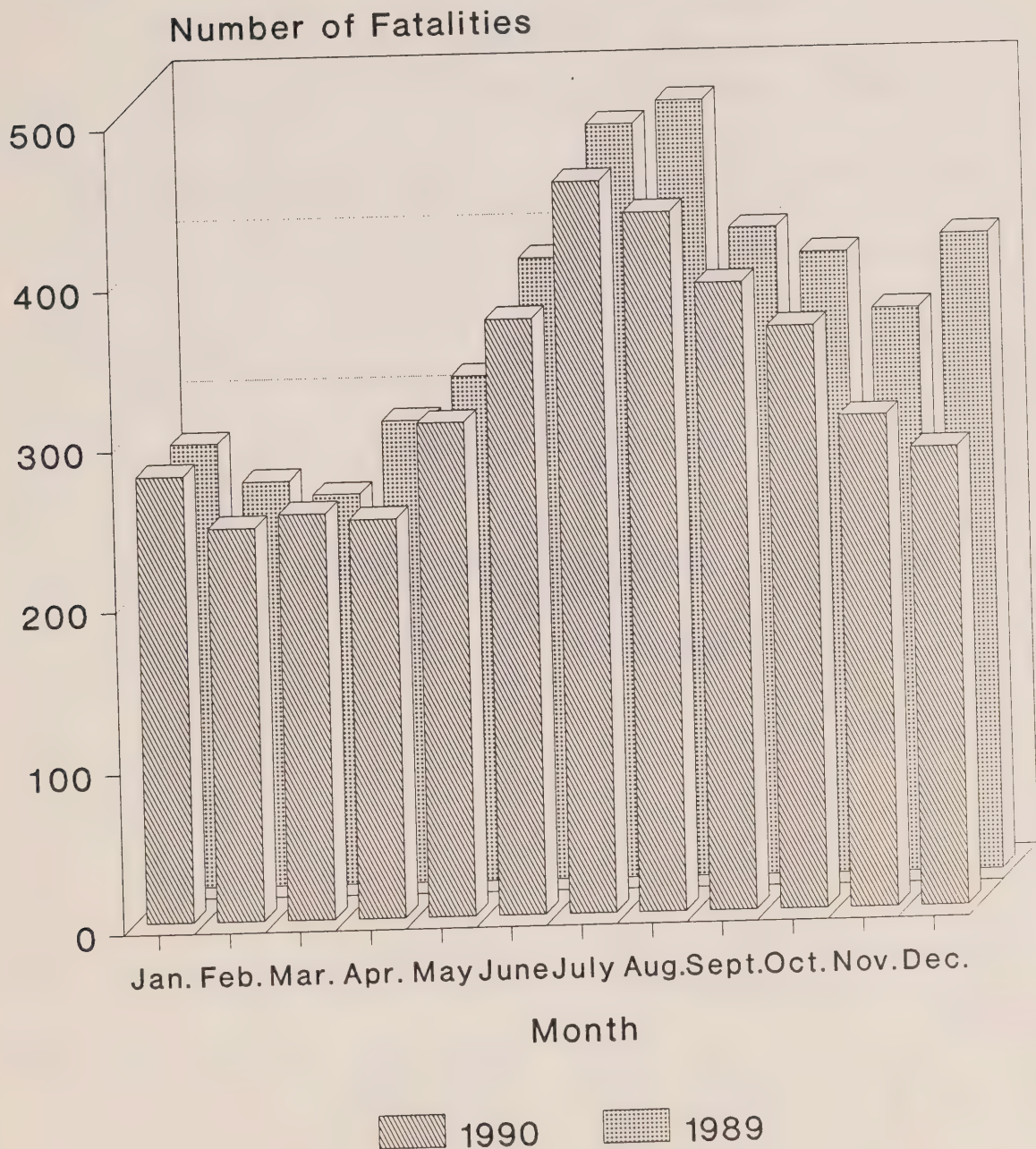
National Trend in Monthly Fatalities

January 1989 – December 1990

The following table and graph summarize fatalities for the last 12-month period (January 1990 – December 1990) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1989	1990	1990/1989
January	275	277	0.7%
February	251	244	-2.8%
March	242	252	4.1%
April	287	248	-13.6%
May	314	307	-2.2%
June	387	371	-4.1%
July	469	456	-2.8%
August	483	436	-9.7%
September	403	391	-3.0%
October	387	363	-6.2%
November	351	306	-12.8%
December	397	285	-28.2%
12 Month Total	4246	3936	-7.3%

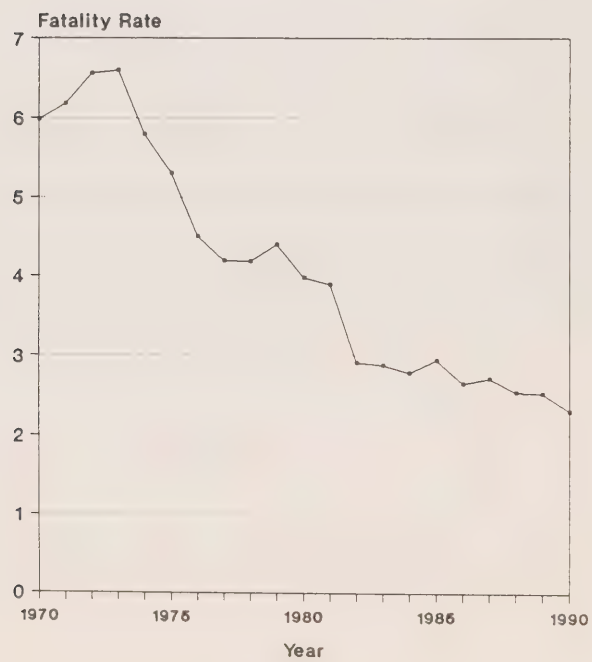
Persons Killed In Traffic Accidents In Canada 1989 - 1990



Traffic Accident Fatalities 1970 - 1990



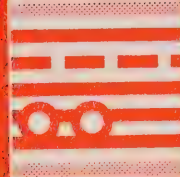
Fatality Rate / 10,000 Motor Vehicles Registered 1970 - 1990





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August 1991

Table 1

Results of June 1991 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1980-1991

% of Car Drivers Wearing Shoulder Belts, Where Available*

Prov.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Nfld	2.8	8.6	67.8	75.9	69.7	65.5	61.4	64.6	72.4	64.6	84.2	91.6
PEI	6.2	3.4	7.2	5.6	9.3	17.9	13.7	50.0	82.0	72.7	65.2	74.7
NS	9.3	11.4	8.7	12.1	20.2	80.8	79.8	68.6	73.4	79.1	83.4	83.9
NB	5.6	8.1	4.2	66.5	60.2	63.4	66.5	65.0	67.6	64.4	76.9	81.9
Que.	39.0	40.7	67.5	60.4	54.3	53.4	67.7	85.8	81.5	81.6	93.5	92.4
Ont.	43.7	52.5	48.9	60.1	61.9	66.4	65.9	67.6	70.3	70.8	71.6	79.7
Man.	6.0	6.4	7.0	11.1	61.6	53.6	61.3	64.6	66.0	79.3	73.4	79.4
Sask.	60.7	50.5	48.4	54.0	49.6	51.1	59.7	71.9	81.0	87.7	91.5	91.5
Alb.	12.7	11.0	17.1	18.2	19.8	24.4	27.8	74.3	82.5	44.6	88.1	84.4
BC	49.3	42.4	53.0	67.4	72.7	73.8	78.3	80.4	79.8	85.2	88.3	87.0
Canada	36.4	38.1	45.6	52.0	54.9	58.4	63.2	74.0	75.8	73.9	81.9	85.1

* Shoulder-belt fitting:

1980 = 95.0%	1986 = 98.7%
1981 = 97.4%	1987 = 98.7%
1982 = 96.8%	1988 = 98.6%
1983 = 96.8%	1989 = 99.1%
1984 = 98.0%	1990 = 99.6%
1985 = 97.9%	1991 = 99.2%



Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
June 1991

Province	Passenger Cars	Passenger Vans	Light Trucks	Total
Newfoundland	91.6	87.2	87.9	90.6
Prince Edward Island	74.7	60.2	33.5	69.1
Nova Scotia	83.9	82.9	73.1	82.4
New Brunswick	81.9	77.2	65.8	79.9
Quebec	92.4	87.5	89.7	91.7
Ontario	79.7	75.5	56.2	77.1
Manitoba	79.4	73.6	70.7	77.7
Saskatchewan	91.5	87.2	88.2	90.5
Alberta	84.4	77.9	66.5	81.2
British Columbia	87.0	84.0	73.9	84.9
Canada	85.1	80.2	70.2	83.0
*Yukon	24.5	26.2	20.2	23.0
*N.W.T.	74.4	79.1	58.6	68.9

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 3

Estimates of Shoulder Seat Belt Use by Road Types -
June 1991

% of Car Drivers Wearing Shoulder Belts

Province	Urban	Rural*	Total
Newfoundland	91.6	91.4	91.6
Prince Edward Island	74.7	68.8	74.3
Nova Scotia	83.9	94.9	85.3
New Brunswick	81.9	77.4	81.3
Quebec	92.4	92.3	92.4
Ontario	79.7	75.2	79.5
Manitoba	79.4	84.7	79.6
Saskatchewan	91.5	89.2	91.4
Alberta	84.4	77.7	84.0
British Columbia	87.0	90.5	87.2
Canada	85.1	84.9	85.1

* Inter city highways or country roads

Transport Canada's latest annual survey of seat belt use was undertaken during the week of June 17 to June 23, 1991. All previous surveys were undertaken during the last week of October of each year. Transport Canada will conduct another belt use survey this year during the last week of October as usual.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased to a record 85.1 percent in 1991 from 81.9 percent in 1990 (see Table 1). This estimate is accurate within ± 0.7 percent 19 times out of 20 in reported samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces were as follows (in rounded percentages):

- Newfoundland's rate improved to 92 percent from 84 percent last year, while the 92 percent rates in Quebec and Saskatchewan were essentially unchanged from 1990.
- British Columbia and Nova Scotia recorded rates of 87 percent and 84 percent respectively, compared to 88 percent and 83 percent.
- Alberta's 84 percent rate was down four percent; New Brunswick followed with a rate of 82 percent, up five percent; Manitoba's rate of 79 percent was up six percent; Ontario's rate of 80 percent was up eight percent, and Prince Edward Island's 75 percent rate was up 10 percent.

Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory showed use rates of 74 percent and 25 percent respectively.

This year we have three provinces attaining belt use rates of more than 90 percent. They are the result of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

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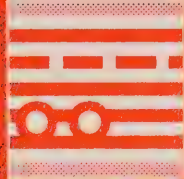
Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 80 percent in passenger vans and 70 percent in light trucks from 78 percent and 68 percent respectively last year. Seat belt use by passenger van drivers varied from 60 percent in P.E.I. to 87 percent in Quebec, Newfoundland and Saskatchewan; use by drivers of light trucks varied from 33 percent in P.E.I. to 90 percent in Quebec. These two categories of vehicles accounted for 24 percent of the vehicles included in the survey.

Survey Method

The survey was undertaken by observers at 178 urban sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. In addition to these 178 sites, the survey was also undertaken at 22 rural sites (on highways or country roads), and the results from these sites are summarized separately in Table 3. A weighted combined estimate based on all 200 sites is also presented, for which the traffic counts on urban and rural sites are used as weights. The observation techniques in the survey were identical to those of the 1981 to 1990 surveys, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, weather conditions, type of vehicle, driver's sex and age group.

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October 1991

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-L21

Preliminary Fatality Statistics

During the first six months of 1991, there were 1609 fatalities in Canada, a decrease of 5.7% over the number of traffic deaths recorded during the same period last year, and a decrease of 6.5% compared to the average fatalities for this period in the last three years.

During this period, motor vehicle driver, motor vehicle passenger, pedestrian and bicyclist fatalities (at 797, 425, 212 and 31) decreased by 2.6%, 7.4%, 22.1% and 31.1% respectively while motorcyclist fatalities (at 103) increased by 8.4% when compared to fatalities among the same road user classes during the same period in 1990.

The projected traffic fatality total for Canada in 1991 is 3869. This total represents a 2.3% decrease over annual road accident deaths in 1990 and a 6.1% decrease compared to the average fatalities during the last three years.

1991 Preliminary Fatality Statistics									Percent Change	
	Jan	Feb	Mar	Apr	May	June	Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
Nfld.	6	4	6	3	3	5	27	70	-10.0	-2.4
P.E.I.	2	0	2	2	3	3	12	37	33.3	63.6
N.S.	3	10	20	6	9	14	62	175	29.2	26.5
N.B.	11	7	10	8	6	14	56	136	1.8	-13.8
Que.	78	61	70	50	92	118	469	1079	-5.6	-2.3
Ont.	80	67	72	51	89	91	450	1078	-6.6	-11.2
Man.	11	7	5	10	9	9	51	147	21.4	5.5
Sask.	6	5	16	11	20	12	70	162	6.1	-11.0
Alta.	27	35	25	20	37	29	173	433	-5.5	-4.6
B.C.	23	29	32	49	51	49	233	532	-19.7	-14.0
Yukon	0	0	0	0	1	4	5	18	150.0	87.5
N.W.T.	0	0	0	0	0	1	1	2	-50.0	-72.7
Canada	247	225	258	210	320	349	1609	3869	-2.3	-6.1

1991 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first six months of 1991.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	133	66	35	2	1	10	247
February	118	59	37	1	2	8	225
March	131	72	37	1	5	12	258
April	107	50	28	7	14	4	210
May	157	81	37	11	30	4	320
June	151	97	38	9	51	3	349
Total	797	425	212	31	103	41	1609

Fatality Trends By Road User Class and Province/Territory – 1990 –1991

The following table presents comparisons of fatalities by road user class and province/territory for the first six months of 1990 and 1991. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change
NFLD	16	17	6.3%	5	6	20.0%	8	4	-50.0%	0	0	-	0	0	-
P.E.I.	4	7	75.0%	2	2	0.0%	3	1	-66.7%	0	1	-	0	1	-
N.S.	24	33	37.5%	13	23	76.9%	8	4	-50.0%	1	0	-	2	2	0.0%
N.B.	24	25	4.2%	16	16	0.0%	13	10	-23.1%	0	0	-	2	4	100.0%
QUE.	243	232	-4.5%	111	102	-8.1%	76	58	-23.7%	17	11	-35.3%	37	43	16.2%
ONT.	238	225	-5.5%	127	126	-0.8%	75	65	-13.3%	14	7	-50.0%	28	22	-21.4%
MAN.	18	24	33.3%	15	12	-20.0%	6	10	66.7%	1	1	0.0%	2	3	50.0%
SASK.	33	36	9.1%	22	13	-40.9%	7	11	57.1%	2	2	0.0%	2	5	150.0%
ALTA	90	81	-10.0%	58	59	1.7%	23	18	-21.7%	4	3	-	7	6	-14.3%
B.C.	126	113	-10.3%	89	65	-27.0%	53	31	-41.5%	6	5	-16.7%	14	17	21.4%
YUK.	0	3	-	1	1	-	0	0	-	0	1	-	1	0	-
N.W.T.	2	1	-50.0%	0	0	-	0	0	-	0	0	-	0	0	-
CANADA	818	797	-2.6%	459	425	-7.4%	272	212	-22.1%	45	31	-31.1%	95	103	8.4%

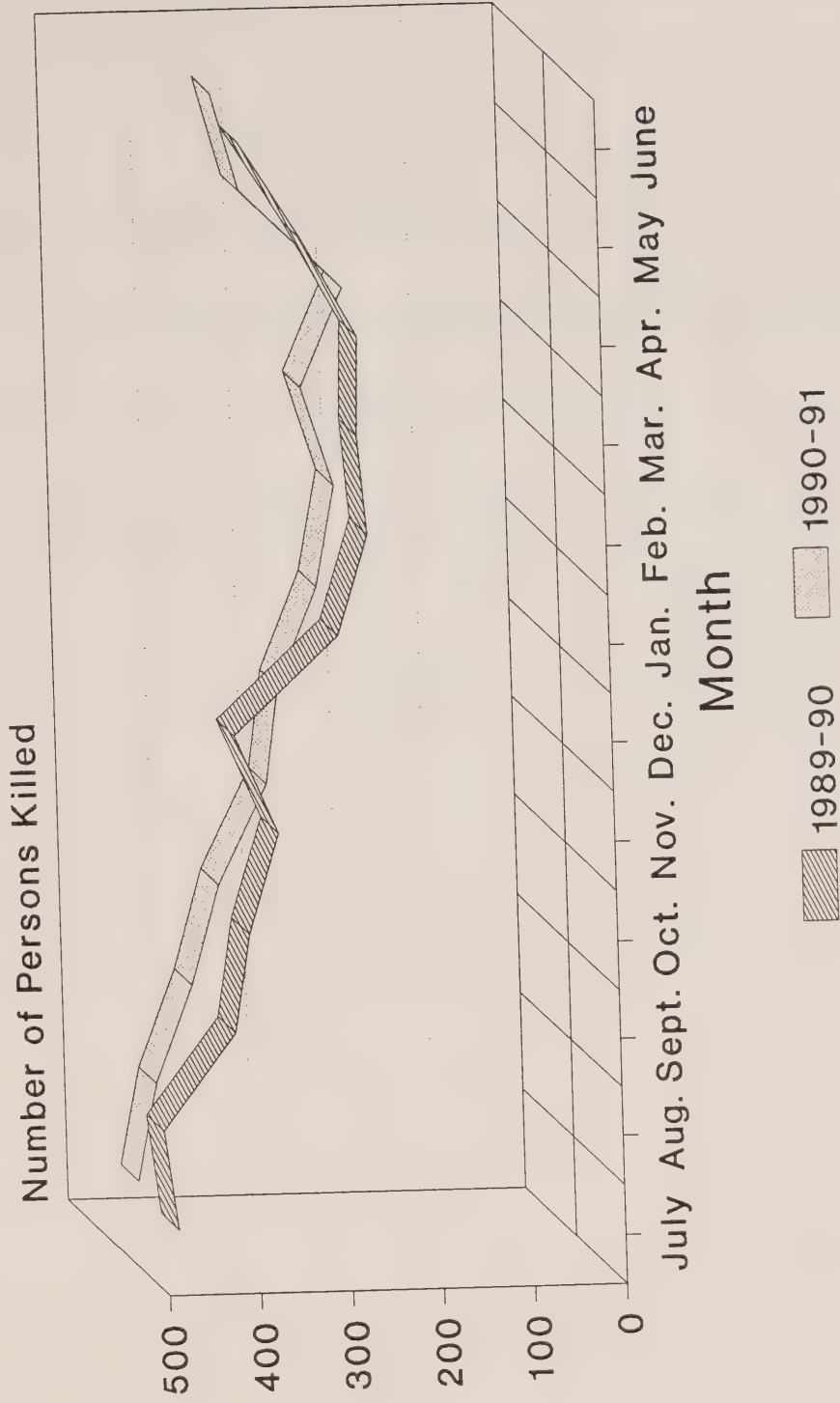
National Trend in Monthly Fatalities

July 1989 – June 1991

The following table and graph summarize fatalities for the last 12-month period (July 1990 – June 1991) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1989	1990	1990/1989
July	471	459	-2.5%
August	484	437	-9.7%
September	403	395	-2.0%
October	385	363	-5.7%
November	350	308	-12.0%
December	396	293	-26.0%
	1990	1991	1991/1990
January	279	247	-11.5%
February	244	225	-7.8%
March	252	258	2.4%
April	249	210	-15.7%
May	308	320	3.9%
June	374	349	-6.7%
Jan. – June Total	1706	1609	-5.7%
12 Month Total	4195	3864	-7.9%

Persons Killed in Traffic Accidents In Canada 1989-90 / 1990-91

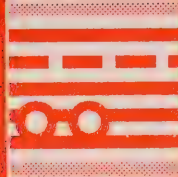




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January 1992

Table 1

Results of October 1991 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1980-1991

% of Car Drivers Wearing Shoulder Belts, Where Available

Prov.	1983 Oct.	1984 Oct.	1985 Oct.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.
Nfld	75.9	69.7	65.5	61.4	64.6	72.4	64.6	84.2	91.6	90.6
PEI	5.6	9.3	17.9	13.7	50.0	82.0	72.7	65.2	74.7	78.7
NS	12.1	20.2	80.8	79.8	68.6	73.4	79.1	83.4	83.9	86.3
NB	66.5	60.2	63.4	66.5	65.0	67.6	64.4	76.9	81.9	83.2
Que.	60.4	54.3	53.4	67.7	85.8	81.5	81.6	93.5	92.4	92.8
Ont.	60.1	61.9	66.4	65.9	67.6	70.3	70.8	71.6	79.7	83.2
Man.	11.1	61.6	53.6	61.3	64.6	66.0	79.3	73.4	79.4	79.9
Sask.	54.0	49.6	51.1	59.7	71.9	81.0	87.7	91.5	91.5	90.6
Alb.	18.2	19.8	24.4	27.8	74.3	82.5	44.6	88.1	84.4	83.2
BC	67.4	72.7	73.8	78.3	80.4	79.8	85.2	88.3	87.0	84.9
Yukon									24.5*	74.8
N.W.T.									74.4*	75.6
Canada	52.0	54.9	58.4	63.2	74.0	75.8	73.9	81.9	85.1	86.0

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
October 1991

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	90.6	85.4	85.6	89.8
Prince Edward Island	78.7	70.6	49.5	75.2
Nova Scotia	86.3	76.2	73.1	84.1
New Brunswick	83.2	77.4	75.0	81.3
Quebec	92.8	91.0	77.8	91.9
Ontario	83.2	79.7	65.0	81.7
Manitoba	79.9	82.4	61.6	78.6
Saskatchewan	90.6	88.9	82.3	88.7
Alberta	83.2	83.0	68.9	81.5
British Columbia	84.9	85.4	69.7	83.5
Yukon	74.8	44.3	51.0	60.0
N.W.T.	75.6	77.4	64.3	71.4
Canada	86.0	83.2	70.2	83.8

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 21 to October 27, 1991.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by four percent to a record 86.0 percent during 1991 (see Table 1). This estimate is accurate within ± 0.8 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- Quebec, Saskatchewan and Newfoundland achieved rates of 93, 91 and 91 percent respectively which rank them as world leaders in seat belt usage. Quebec's and Saskatchewan's rates are each down one percent over 1990 but Newfoundland's rate is up seven percent.
- Nova Scotia's 86 percent use rate is up three percent; British Columbia's 85 percent use is down three percent, and New Brunswick's 83 percent is up six percent.
- Ontario's rate increased by 11 percent to 83 percent; Alberta's use fell five percent to 83 percent, and Prince Edward Island recorded a 14 percent increase to 79 percent. Manitoba's rate increased seven percent to 80 percent.
- Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory show use rates of 76 and 75 percent respectively.

This year we have three provinces attaining belt use rates of more than 90 percent. They are the result of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 83 percent in passenger vans and 70 percent in light trucks from 78 and 68 percent respectively last year. Seat belt use by passenger van drivers varied from 44 percent in Yukon to 91 percent in Quebec; use by drivers of light trucks varied from 50 percent in P.E.I. to 86 percent in Newfoundland. These two categories of vehicles accounted for 21 percent of the vehicles included in the survey.

Survey Method

All the previous surveys were conducted on sites selected in 1980. The design and the sample sites had not been updated in ten years. Population distribution have changed. New roads and additional intersections with traffic lights have not had a chance of inclusion in the sample. This sample may have become inefficient overtime. With this in mind, the survey was re-designed using 1986 Census information and up-to-date list of traffic lights. The October 1991 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys which were conducted at 200 sites. In previous years we have produced separate estimates for rural roads (inter-city highways or county roads). From this year, this practice will be discontinued as belt use rates for rural roads were based on a very small sample of observations. The observation techniques in the survey were identical to those of the 1981 to June 1991 surveys, in that observers recorded the availability of shoulder belts, drivers use of shoulder belts, daytime use of vehicle lights, weather conditions, type of vehicle, driver's sex and age group.

For further information write to:

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Evaluation and Data Systems,
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CL 9209(E)

Road Safety

Sécurité routière

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CONSUMERS' DISTRIBUTING CATALOGUE
FISHER-PRICE CAR BOOSTER SEAT

For your information, the new Spring/Summer Consumers' Distributing 1992 catalogue has an error in it concerning the weight range specified for the new Fisher-Price Car Booster Seat. Page 198 of the catalogue shows the Fisher-Price Car Booster Seat and the description indicates it is for a child in a weight range of 30 lbs. to 60 lbs. This weight should have read 40 lbs. to 60 lbs. The Fisher-Price statement of compliance label affixed to the seat provides the correct information 18 kg to 27 kg (40 lbs. to 60 lbs.)

Fisher-Price and Consumers' Distributing have since resolved the problem. Consumers' Distributing have issued a corrected insert for the store catalogues.

For further information, please contact any office of the Canadian Automobile Association or Transport Canada, Road Safety Directorate, 344 Slater Street, Ottawa, Ontario, K1A 0N5



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Government
Publication CL 9211(e)

LEAFLET

TP 2436

FEUILLET

May 1992

Preliminary Fatality Statistics

During 1991, there were 3654 traffic fatalities in Canada, a decrease of 7.8% over 1990 fatalities and a decrease of 11.3% compared to the average fatalities in the last three years.

During this period, decreases in traffic fatalities were observed among all classes of road users. The number of motor vehicle drivers, motor vehicle passengers, pedestrians, motorcyclists and bicyclists killed in traffic collisions during 1991 (at 1762, 957, 527, 231 and 101) represented decreases of 6.2%, 11.8%, 9.6%, 10.5% and 4.7% respectively over fatalities among the same road user classes during 1990.

1991 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	6	4	6	3	3	5	2	2	5	4	5	6	51	-26.1	-29.2
P.E.I.	2	0	2	2	3	3	0	7	2	2	6	2	31	6.9	36.8
N.S.	3	10	20	6	9	14	7	13	12	7	8	6	115	-22.8	-16.9
N.B.	11	7	10	7	6	14	7	8	17	9	13	9	118	-24.4	-25.3
Que.	78	61	72	50	94	124	101	116	71	81	79	73	1000	-7.7	-9.4
Ont.	79	67	72	54	90	97	115	128	109	95	98	87	1091	-2.6	-10.1
Man.	11	9	5	10	10	14	9	11	6	8	3	10	106	-12.4	-23.7
Sask.	6	5	14	11	20	13	20	22	18	20	10	11	170	10.4	-6.6
Alta.	27	35	26	21	41	33	51	54	44	27	31	30	420	2.7	-7.4
B.C.	23	29	32	51	52	49	45	79	48	52	48	29	537	-18.0	-13.2
Yukon	0	0	0	0	1	4	1	1	1	2	0	0	10	25.0	7.1
N.W.T.	0	0	0	1	0	2	0	1	0	0	1	0	5	-37.5	-34.8
Canada	246	227	259	216	329	372	358	442	333	307	302	263	3654	-7.8	-11.3

1991 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for 1991.

MONTH	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	UNSPECIFIED	TOTAL
January	133	65	35	2	1	10	246
February	120	60	37	1	2	7	227
March	130	73	39	1	5	11	259
April	106	50	32	7	17	4	216
May	157	82	40	12	33	6	330
June	155	98	44	14	56	4	371
July	166	98	43	14	32	5	358
August	198	125	56	21	33	9	442
September	155	81	50	12	32	3	333
October	155	76	52	8	13	3	307
November	155	76	53	6	5	7	302
December	132	73	46	3	2	7	263
Total	1762	957	527	101	231	76	3654

Fatality Trends By Road User Class and Province/Territory – 1990 –1991

The following table presents comparisons of fatality estimates by road user class and province/territory for 1990 and 1991. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change	1990	1991	% Change
NFLD	27	27	0.0%	20	12	-40.0%	14	10	-28.6%	0	0	-	5	2	-60.0%
P.E.I.	13	15	15.4%	6	9	50.0%	7	3	-57.1%	0	1	-	2	3	50.0%
N.S.	65	55	-15.4%	50	38	-24.0%	21	17	-19.0%	2	1	-50.0%	9	4	-55.6%
N.B.	79	51	-35.4%	36	34	-5.6%	30	18	-40.0%	3	4	33.3%	5	9	80.0%
QUE.	526	485	-7.8%	228	225	-1.3%	178	145	-18.5%	43	38	-11.6%	88	77	-12.5%
ONT.	540	538	-0.4%	322	296	-8.1%	154	154	0.0%	29	27	-6.9%	74	62	-16.2%
MAN.	55	51	-7.3%	39	24	-38.5%	14	20	42.9%	4	1	-75.0%	6	8	33.3%
SASK.	81	83	2.5%	49	49	0.0%	10	24	140.0%	4	3	-25.0%	5	6	20.0%
ALTA	201	191	-5.0%	128	119	-7.0%	45	59	31.1%	10	12	20.0%	15	19	26.7%
B.C.	283	254	-10.2%	201	150	-25.4%	108	76	-29.6%	11	13	18.2%	49	41	-16.3%
YUK.	4	7	75.0%	1	1	0.0%	1	1	0.0%	0	1	-	0	0	-
N.W.T.	4	5	25.0%	3	0	-	0	0	-	0	0	-	0	0	-
CANADA	1878	1762	-6.2%	1083	957	-11.6%	582	527	-9.5%	106	101	-4.7%	258	231	-10.5%

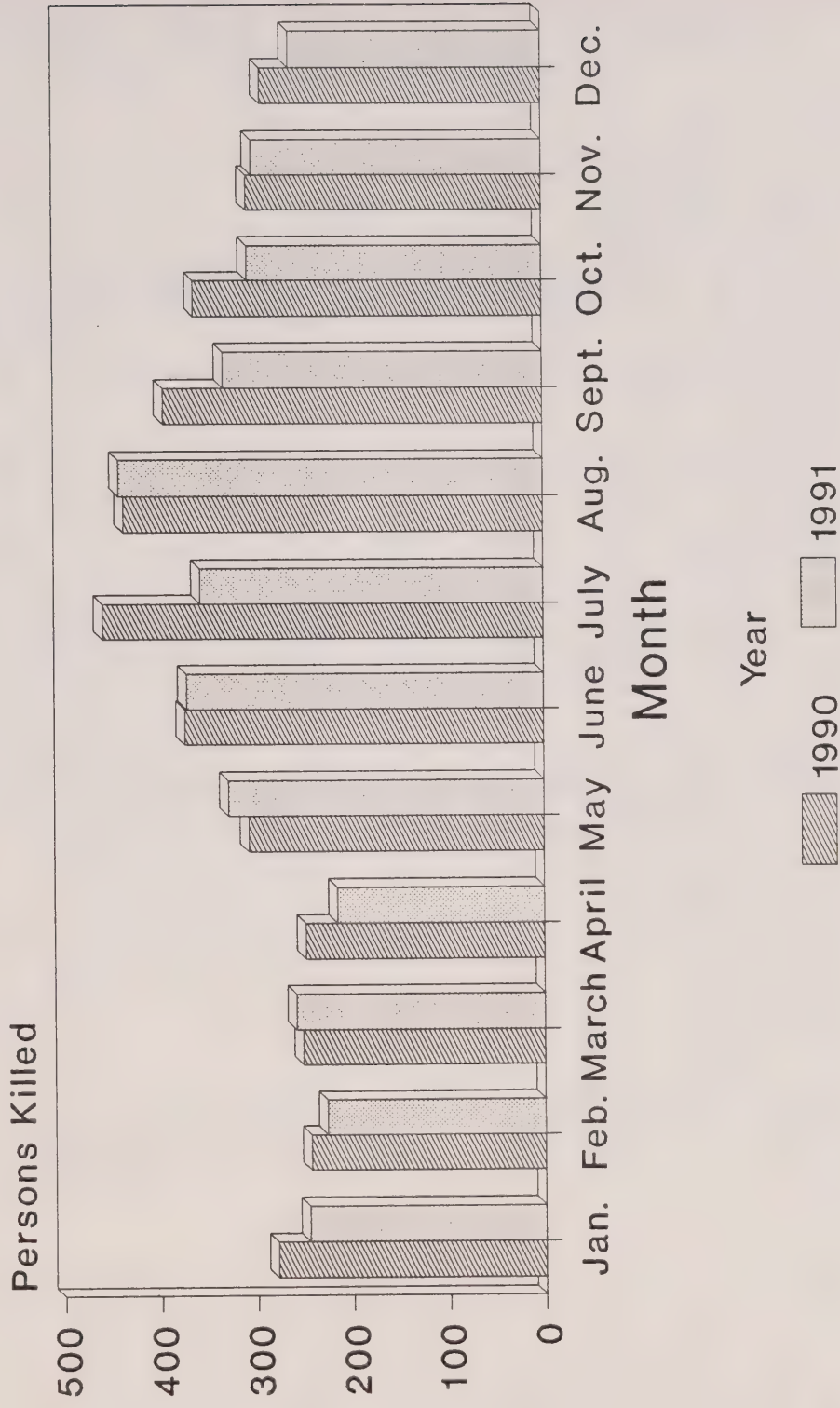
National Trend in Monthly Fatalities

January 1990 – December 1991

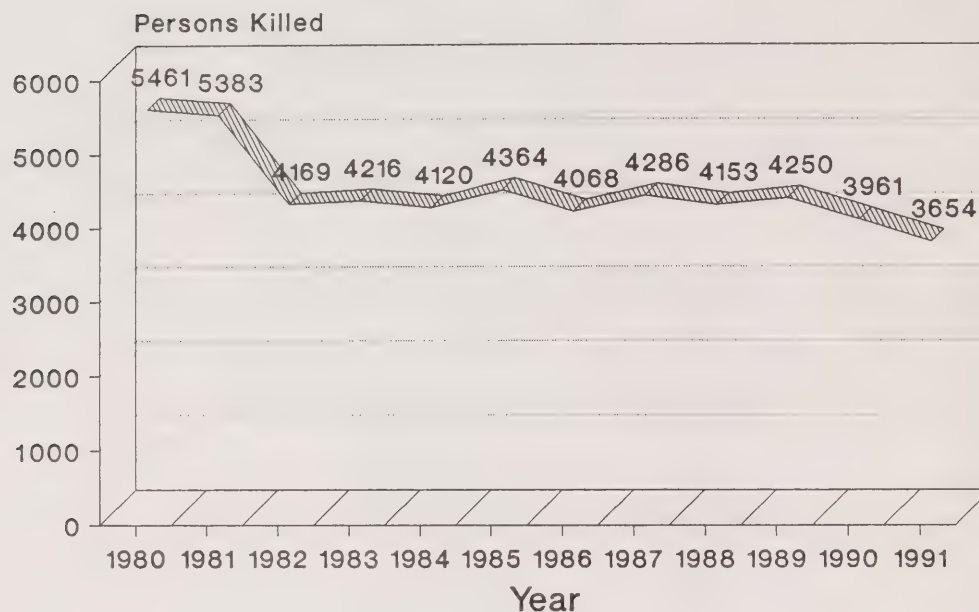
The following table and graph summarize fatalities for the last 12-month period (January 1991 – December 1991) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1990	1991	1991/1990
January	279	246	-11.8%
February	244	227	-7.0%
March	252	259	2.8%
April	249	216	-13.3%
May	308	329	6.8%
June	374	372	-0.5%
July	459	358	-22.0%
August	437	442	1.1%
September	395	333	-15.7%
October	363	307	-15.4%
November	308	302	-1.9%
December	293	263	-10.2%
12 Month Total	3961	3654	-7.8%

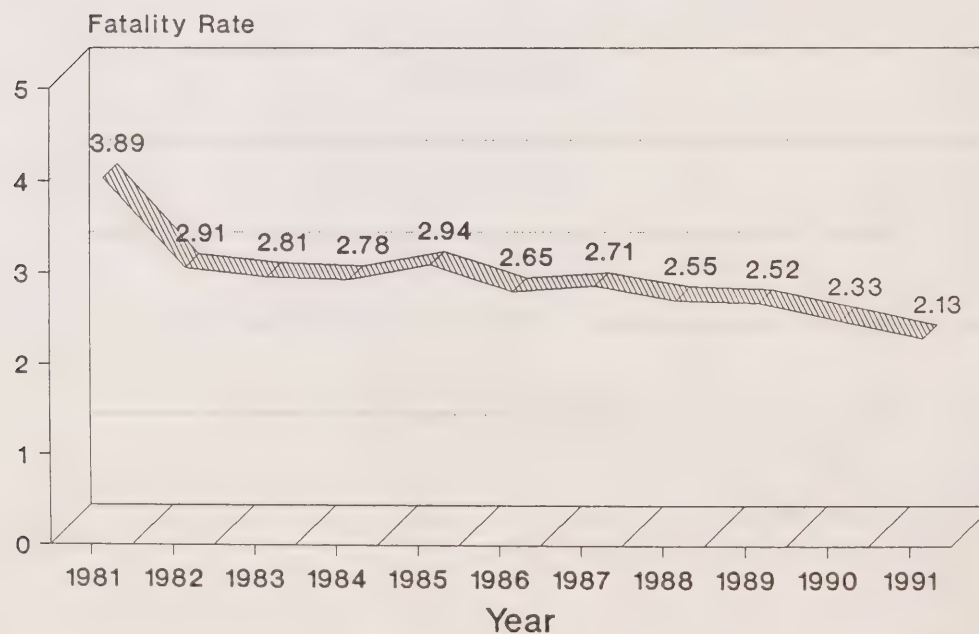
Persons Killed In Traffic Collisions By Month - Canada 1990 -1991



Persons Killed In Traffic Collisions In Canada - 1980 - 1991



Persons Killed Per 10000 Motor Vehicles Registered - Canada 1981- 1990



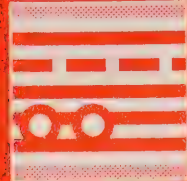
Note: 1991 figure is preliminary.



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August 1992

Table 1

Results of June 1992 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1983-1992

% of Car Drivers Wearing Shoulder Belts, Where Available



Prov.	1983 Oct.	1984 Oct.	1985 Oct.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June
Nfld.	75.9	69.7	65.5	61.4	64.6	72.4	64.6	84.2	91.6	90.6	93.9
P.E.I.	5.6	9.3	17.9	13.7	50.0	82.0	72.7	65.2	74.7	78.7	81.8
N.S.	12.1	20.2	80.8	79.8	68.6	73.4	79.1	83.4	83.9	86.3	85.5
N.B.	66.5	60.2	63.4	66.5	65.0	67.6	64.4	76.9	81.9	83.2	81.3
Que.	60.4	54.3	53.4	67.7	85.8	81.5	81.6	93.5	92.4	92.8	91.3
Ont.	60.1	61.9	66.4	65.9	67.6	70.3	70.8	71.6	79.7	83.2	80.5
Man.	11.1	61.6	53.6	61.3	64.6	66.0	79.3	73.4	79.4	79.9	81.6
Sask.	54.0	49.6	51.1	59.7	71.9	81.0	87.7	91.5	91.5	90.6	93.9
Alta.	18.2	19.8	24.4	27.8	74.3	82.5	44.6	88.1	84.4	83.2	86.3
B.C.	67.4	72.7	73.8	78.3	80.4	79.8	85.2	88.3	87.0	84.9	91.1
Y.T.									24.5*	74.8	58.8
N.W.T.									74.4*	75.6	64.7
Canada	52.0	54.9	58.4	63.2	74.0	75.8	73.9	81.9	85.1	86.0	85.9

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
June 1992

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	93.9	94.7	91.2	93.7
Prince Edward Island	81.8	79.8	45.7	76.8
Nova Scotia	85.5	83.7	70.3	83.7
New Brunswick	81.3	74.9	63.9	78.4
Quebec	91.3	90.0	77.1	90.4
Ontario	80.5	78.1	62.5	79.1
Manitoba	81.6	76.3	59.9	78.9
Saskatchewan	93.9	93.2	83.8	92.1
Alberta	86.3	86.0	65.9	82.6
British Columbia	91.1	90.6	80.6	89.7
Yukon	58.8	69.5	53.4	59.0
N.W.T.	64.7	65.6	48.2	60.3
Canada	85.9	84.6	70.3	84.4

Transport Canada's latest annual survey of seat belt use was undertaken during the week of June 22 to June 28, 1992.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by one percent to 85.9 percent in June 1992 from 85.1 percent in June 1991 (see Table 1). This estimate is accurate within ± 0.7 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- Newfoundland and Saskatchewan recorded belt use rates of 94 percent, up from 92 percent last year, while Quebec and British Columbia had 91 percent rates, compared to 92 and 87 percent respectively.
- Nova Scotia and Alberta achieved belt use rates of 86 percent, up from 84 percent, while Manitoba and P.E.I. had 82 percent rates, compared to 79 and 75 percent respectively.
- Ontario and New Brunswick observed belt use rates of 81 percent, compared to 80 and 82 percent respectively. Yukon's rate increased by 34 percent while Northwest Territories fell nine percent to 65 percent.

In this year's survey four provinces achieved belt use rates of more than 90 percent and the remaining six all achieved belt use rates of more than 80 percent - a first since Transport Canada starting conducting seat belt use surveys in 1975. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 85 percent in passenger vans and 70 percent in light trucks from 83 and 70 percent respectively last year. Seat belt use by passenger van drivers varied from 66 percent in the Northwest Territories to 95 percent in Newfoundland; use by drivers of light trucks varied from 46 percent in P.E.I. to 91 percent in Newfoundland. These two categories of vehicles accounted for 22 percent of the vehicles included in the survey.

Survey Method

The June 1992 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1981 to October 1991 surveys. In the previous surveys, observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, weather conditions, type of vehicle, driver's sex and age group. The June 1992 was the first survey in which data was collected on belt use by all occupants of the vehicle but without such variables as age and sex of occupants and light use of the vehicle. The October 1992 survey will collect all the information collected in our previous surveys.

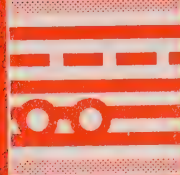
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Publication
CL 9218(e)

Road Safety Sécurité routière

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October 1992

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Preliminary Fatality Statistics

During the first six months of 1992, there were 1472 fatalities in Canada, a decrease of 10.8% over the number of traffic deaths recorded during the same period last year, and a decrease of 13.6% compared to the average fatalities for this period during the last three years.

During this period, decreases in traffic fatalities were observed among all classes of road users. The number of motor vehicle drivers, motor vehicle passengers, pedestrians, motorcyclists, and bicyclists killed in traffic collisions during the first six months of 1992 (at 744, 397, 247, 114 and 31) represent decreases of 7.1%, 7.0%, 25.9%, 34.2% and 18.4% respectively over the same road user classes during the same period in 1991.

The projected traffic fatality total for Canada in 1992 is 3429. This total represents a 6.9% decrease over annual traffic fatalities in 1991 and a 13.5% decrease compared to the average fatalities during the last three years.

1992 Preliminary Fatality Statistics									Percent Change	
Month							Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
Jan	Feb	Mar	Apr	May	June					
Nfld.	2	0	1	4	4	6	17	39	-37.0	-43.3
P.E.I.	0	0	0	0	2	0	2	6	-83.3	-78.6
N.S.	6	2	6	9	10	8	41	105	-33.9	-18.0
N.B.	9	10	6	5	7	14	51	119	-7.3	-16.8
Que.	71	76	43	47	81	94	412	905	-14.3	-15.9
Ont.	75	75	55	77	94	79	455	1071	-1.1	-8.5
Man.	5	9	10	7	12	6	49	130	-15.5	-1.3
Sask.	10	4	13	17	16	11	71	169	2.9	-1.8
Alta.	25	13	39	26	29	31	163	395	-10.9	-9.9
B.C.	25	37	26	29	38	44	199	458	-15.7	-22.8
Yukon	1	0	0	0	0	5	6	20	20.0	125.0
N.W.T.	1	0	0	2	0	3	6	12	100.0	50.0
Canada	230	226	199	223	293	301	1472	3429	-10.8	-13.6

1992 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence for the first six months of 1992.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	128	52	39	0	1	10	230
February	110	71	30	1	1	13	226
March	90	61	32	5	2	9	199
April	123	50	30	6	11	3	223
May	140	86	32	8	23	4	293
June	153	77	20	11	37	3	301
Total	744	397	183	31	75	42	1472

Fatality Trends By Road User Class and Province/Territory - 1991 - 1992

The following table presents comparisons of fatalities by road user class and province/territory for the first six months of 1991 and 1992. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change
NFLD	16	8	-50.0%	6	4	-33.3%	4	2	-50.0%	0	0	-	1	2	-
P.E.I.	7	1	-85.7%	2	1	-50.0%	1	0	-100.0%	1	0	-	1	0	-
N.S.	33	22	-33.3%	23	14	-39.1%	4	3	-25.0%	1	0	-	2	2	0.0%
N.B.	24	24	0.0%	16	21	31.3%	10	3	-70.0%	0	0	-	4	3	-25.0%
QUE.	232	214	-7.8%	104	79	-24.0%	62	51	-17.7%	15	12	-20.0%	44	29	-34.1%
ONT.	227	236	4.0%	121	127	5.0%	66	60	-9.1%	8	11	37.5%	30	18	-40.0%
MAN.	25	21	-16.0%	15	23	53.3%	13	5	-61.5%	1	0	-100.0%	3	0	-100.0%
SASK.	36	38	5.6%	13	24	84.6%	11	2	-81.8%	2	1	-50.0%	5	1	-80.0%
ALTA	81	82	1.2%	60	54	-10.0%	23	15	-34.8%	4	4	-	7	5	-28.6%
B.C.	114	91	-20.2%	66	47	-28.8%	53	40	-24.5%	5	3	-40.0%	17	15	-11.8%
YUK.	3	5	-	1	1	-	0	0	-	1	0	-	0	0	-
N.W.T.	3	2	-33.3%	0	2	-	0	2	-	0	0	-	0	0	-
CANADA	801	744	-7.1%	427	397	-7.0%	247	183	-25.9%	38	31	-18.4%	114	75	-34.2%

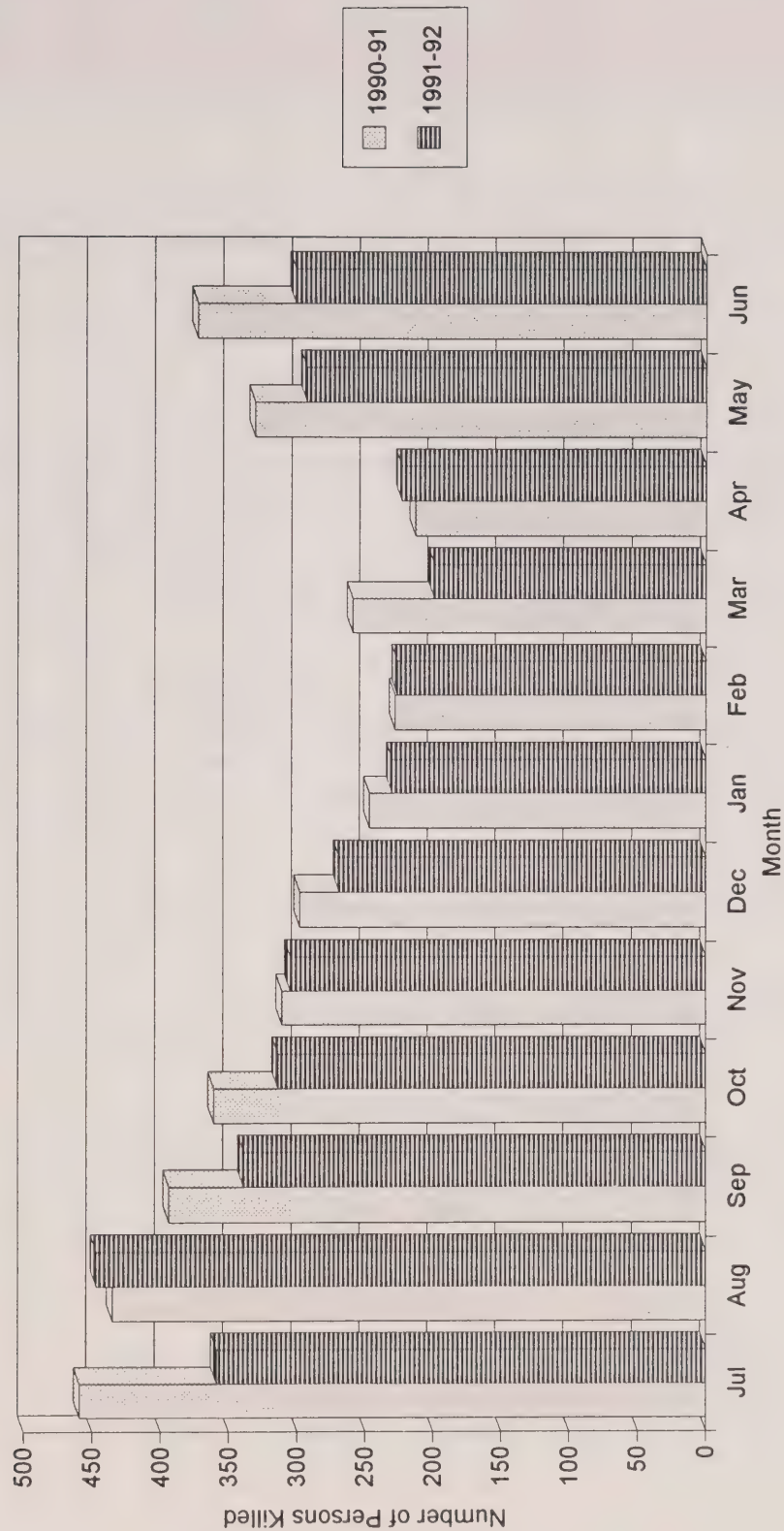
National Trend in Monthly Fatalities

July 1990 - June 1992

The following table and graph summarize fatalities for the last 12-month period (July 1991 - June 1992) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1990	1991	1991/1990
July	459	359	-21.8%
August	435	447	2.8%
September	394	339	-14.0%
October	361	314	-13.0%
November	311	305	-1.9%
December	298	269	-9.7%
	1991	1992	1992/1991
January	247	230	-6.9%
February	228	226	-0.9%
March	259	199	-23.2%
April	213	223	4.7%
May	331	293	-11.5%
June	373	301	-19.3%
Jan. - June Total	1651	1472	-10.8%
12 Month Total	3909	3505	-10.3%

Persons Killed In Traffic Collisions In Canada - 1990-91 - 1991-92



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ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS: 1992 AND THE PAST TEN YEARS



Background

This leaflet provides information on the blood alcohol concentration (BAC) of drivers fatally injured in motor vehicle accidents in Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹, which consists of data collected from reports prepared by provincial coroners, medical examiners or investigating police officers. These data are supplied to TIRF by provincial and territorial agencies. There are no data regarding whether the drivers were at fault in the collision.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). In 1985, Nova Scotia was added to the database followed by Newfoundland in 1986. In 1987, similar data from Quebec and the two territories became available, making the fatality database representative of all twelve jurisdictions.

In reporting the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

1. The numbers presented in figures 2 - 8 are based solely on the number of fatally injured drivers that were tested for blood alcohol concentration.
2. The 1992 and comparative 1991 results include data from all provinces and territories in Canada and are based on victims dying within twelve months of the accident. The ten-year results (1983-1992) are based on data from the original seven provinces and include victims whose death occurred within six hours after the accident, a convention established in previous years.
3. The data include only fatally injured drivers of the principal types of motorized vehicles on public roadways, i.e., automobiles, trucks/vans, motorcycles, and tractor-trailers. Excluded are operators of bicycles and other non-highway vehicles, pedestrians and passengers.

¹ The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

4. BACs are reported in milligrams of alcohol per 100 milliliters of blood, (e.g., .08 = 80 mg %). The percentage of drivers who had been drinking prior to the accident (BAC = 1 mg % or more) and the percentage legally impaired under the Criminal Code of Canada (BAC exceeding 80 mg %) are shown separately in the following figures. For clarity, Figures 6 to 8 show only the percentages of those legally impaired.

1992 Characteristics

In 1992, 81% (1582 of 1956) of fatally injured drivers were tested for level of alcohol in the blood. This rate compares to the 79% tested in 1991. The rates of testing ranged from 66% for Nova Scotia and the Northwest Territories to 100% for the Yukon (Figure 1). Rates of testing were over 70% for ten jurisdictions, of which four were over 90%. The results in jurisdictions where there is a lower rate of testing should be interpreted with caution because there is a possibility of selection bias, i.e., some jurisdictions might have been more inclined to test only drivers suspected of impairment.

Figures 2 to 4 present data from all twelve jurisdictions for 1992. Figure 2 shows the percentage of fatally injured drivers who had been drinking and the percentage of legally impaired for each jurisdiction.

Among tested drivers in 1992, 48% had been drinking and 40% were legally impaired. Both of these rates were the same as those determined from the 1991 data. Of the 1582 drivers tested, 81% were male and 19% were female. Among males, 52% had been drinking compared to 32% of the females. The corresponding rates of illegal impairment were 44% for males and 24% for females (figure not provided). Figure 3 shows that among different age groups, the highest percentage of alcohol impairment occurred among 26-35 year old (53%) and declined dramatically after age forty-five. Examination of BAC by vehicle type (Figure 4) reveals that truck/van (excluding tractor-trailer) drivers had the highest rate of alcohol impairment (50%), followed by motorcycle drivers (40%) and automobile drivers (39%).

Trends During the Past Ten Years

Figures 5 to 8 present data for the ten-year period, 1983 to 1992. To maintain consistency from year to year, only data from the original seven provinces have been aggregated and involve only victims whose death occurred within six hours after the accident.

Figure 5 shows that after eight years of steady decline there has been two consecutive increases. In 1992, the percentage of fatally injured drivers who had been drinking (48%) or who were legally impaired (41%) increased by about 2% from the previous year.

Figure 6 shows that over the ten-year period, fatally injured female drivers were consistently less likely to be impaired by alcohol than were males. In 1992, alcohol impairment among males (46%) and females (23%) increased from 1991, the second year-to-year increase for males and the third year-to-year increase for females.

Figure 7 shows that the overall downward trend was not exhibited equally by all age groups. Fatally injured drivers in the 21-25 year old category showed the largest decrease over ten years.

Figure 8 demonstrates that over the ten-year period, fatally injured drivers of trucks/vans (excluding tractor-trailers) had the highest percentage of illegal BACs, followed by motorcycle drivers and automobile drivers. Rates of impairment for motorcycle drivers decreased for the first time since 1988. The rates for truck/van operators have declined over the ten-year period, but increased since 1991. Automobile drivers exhibited a decline over the same period. Tractor-trailer drivers are not included in Figure 8 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

For further information write to:

Road Users Division
Road Safety Directorate
Transport Canada
Canada Building
Tower 2, 13th Floor
344 Slater Street
Ottawa, Ontario
K1A 0N5

Figure 1
Distribution of Fatally Injured Drivers That Were Tested
by Jurisdiction : 1992



Figure 2
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Jurisdiction : 1992

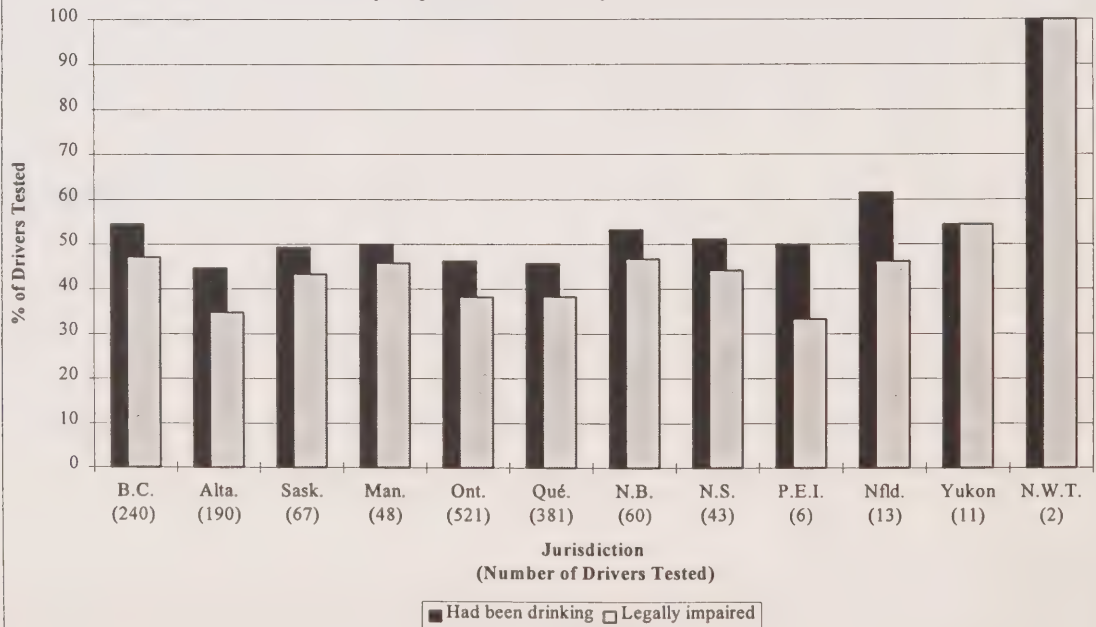


Figure 3
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Age Group : 1992 (Canada)

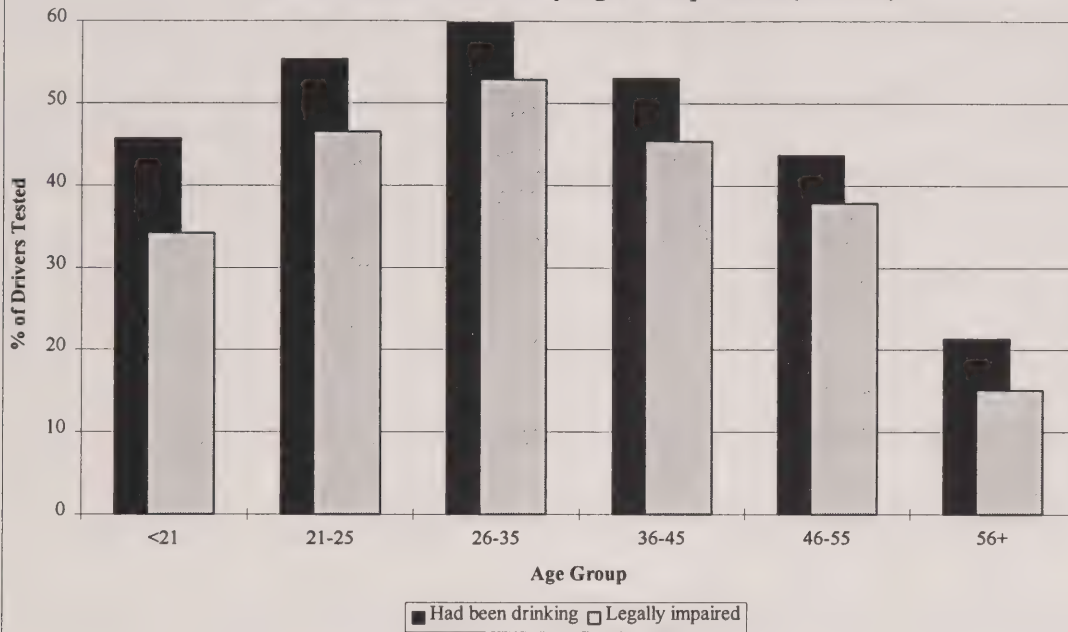


Figure 4
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type : 1992 (Canada)

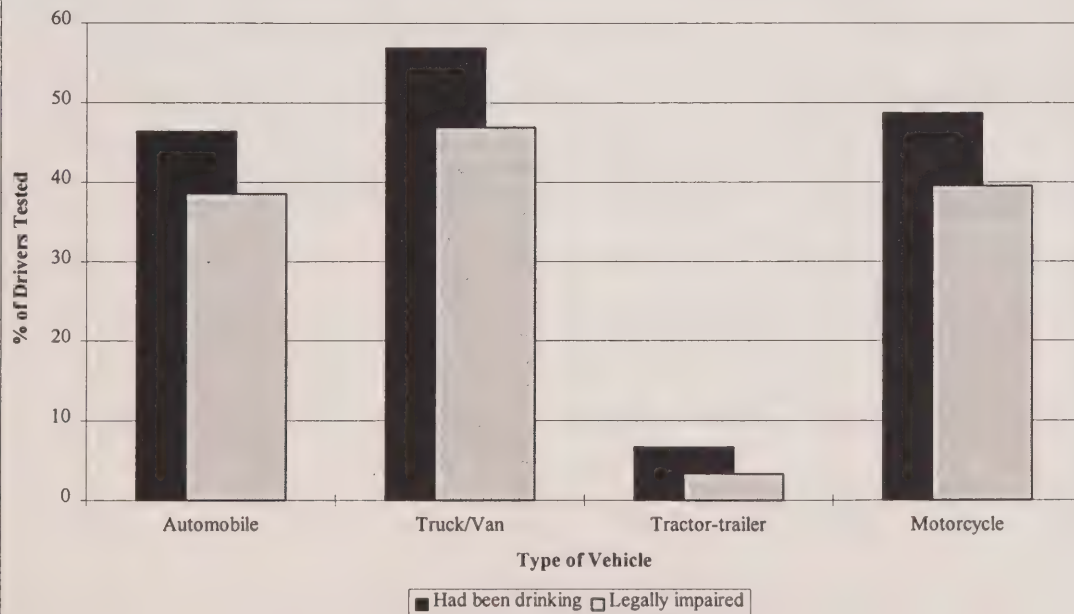


Figure 5
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers : Seven Provinces

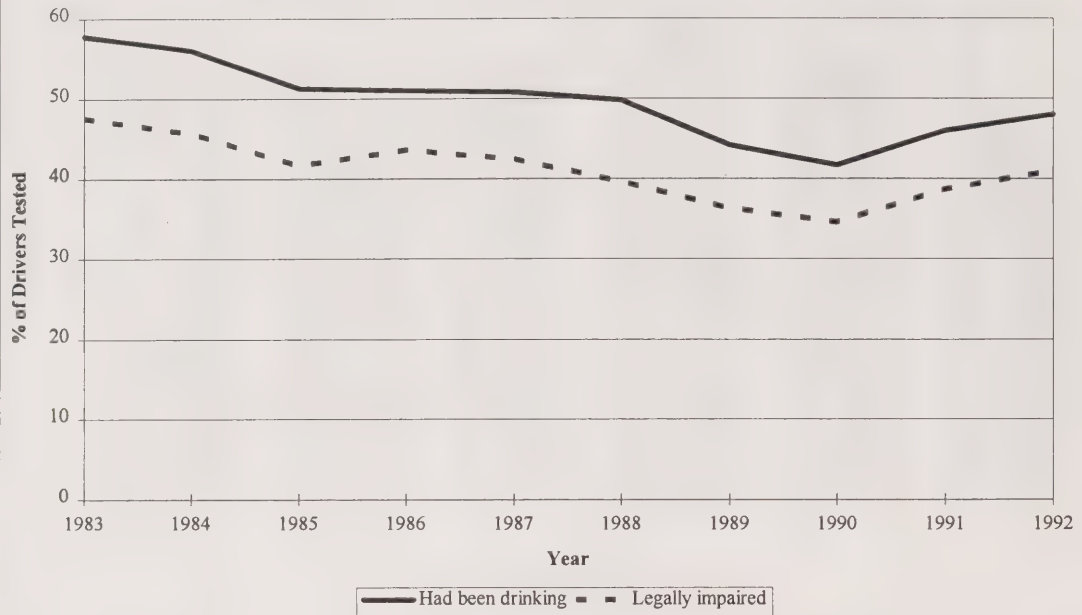


Figure 6
Distribution of Fatally Injured Drivers with Illegal Blood
Alcohol Concentration by Sex : Seven Provinces

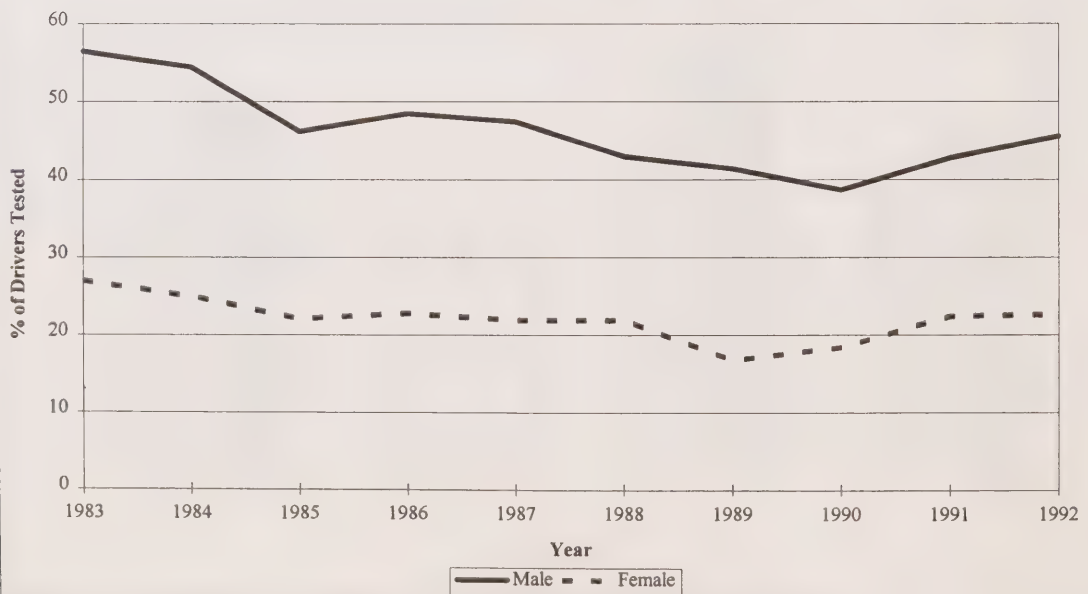


Figure 7
Distribution of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Age Group : Seven Provinces

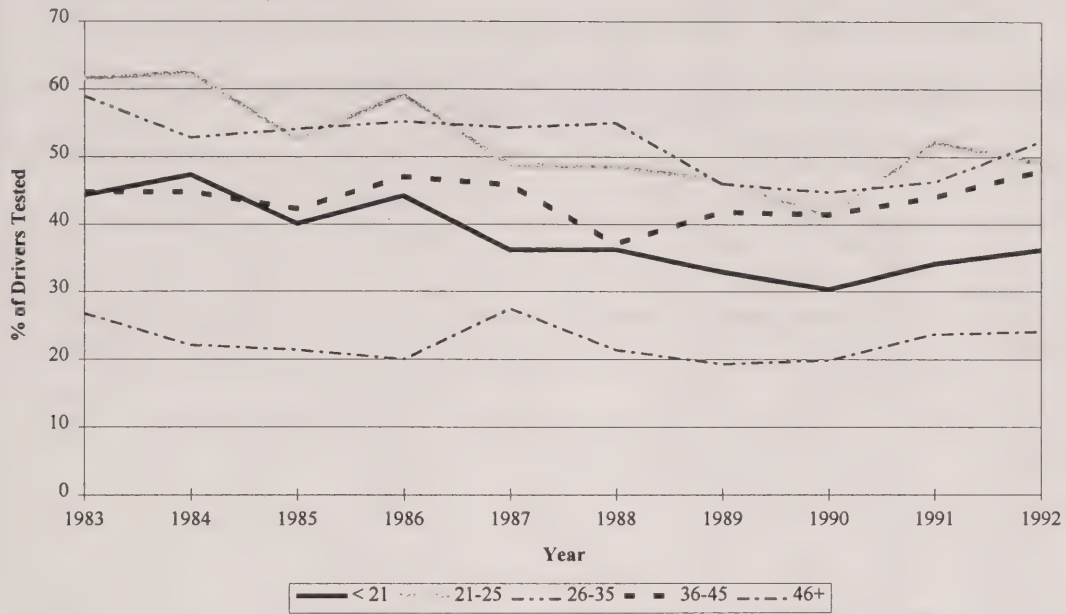
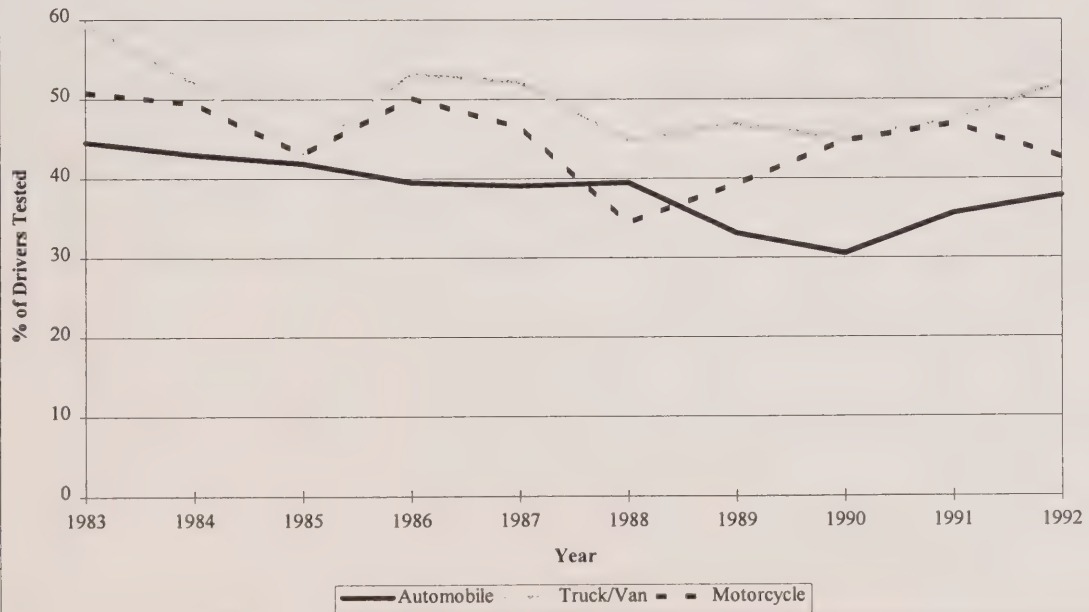


Figure 8
Distribution of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Vehicle Type : Seven Provinces



APPENDIX

Corresponding Data for Figures 1-8
(e.g., Table 1 corresponds to data shown graphically in Figure 1.)

Table 1 Distribution of Fatally Injured Drivers and Percentage of Fatally Injured Drivers Tested by Jurisdiction (1992)		
Jurisdiction	Number of Fatally Injured Drivers	Percentage of Fatally Injured Drivers Tested
British Columbia	265	90.6
Alberta	210	90.5
Saskatchewan	74	90.5
Manitoba	58	82.8
Ontario	661	78.8
Quebec	510	74.7
New Brunswick	76	79.0
Nova Scotia	65	66.2
Prince Edward Island	7	85.7
Newfoundland	16	81.3
Yukon	11	100.0
Northwest Territories	3	66.7
TOTAL	1956	80.9

Table 2 Distribution of BAC among Fatally Injured Drivers by Jurisdiction: 1992 (death within 12 months)			
Jurisdiction	Number of Drivers Tested	Percent of Drivers Tested	
		≥1 mg %	>80 mg %
British Columbia	240	54.6	47.1
Alberta	190	44.7	34.7
Saskatchewan	67	49.3	43.3
Manitoba	48	50.0	45.8
Ontario	521	46.3	38.2
Quebec	381	45.7	38.3
New Brunswick	60	53.3	46.7
Nova Scotia	43	51.2	44.2
Prince Edward Island	6	50.0	33.3
Newfoundland	13	61.5	46.2
Yukon	11	54.5	54.5
Northwest Territories	2	100.0	100.0
TOTAL	1582	48.1	40.3

Table 3

**Distribution of BAC among Fatally Injured Drivers by Age Group:
1992 (Canada; death within 12 months)**

Age Group	Number of Drivers Tested	Percent of Drivers Tested	
		≥1mg %	>80 mg %
Under 21	219	45.7	34.2
21-25	258	55.4	46.5
26-35	408	59.8	52.9
36-45	271	53.1	45.4
46-55	174	43.7	37.9
56+	252	21.4	15.1

Table 4

**Distribution of BAC among Fatally Injured Drivers by Vehicle Type:
1992 (Canada; death within 12 months)**

Vehicle Type	Number of Drivers Tested	Percent of Drivers Tested	
		≥1mg %	>80 mg %
Automobile	1057	46.4	38.5
Truck/Van	343	56.9	49.6
Tractor-trailer	30	6.7	3.3
Motorcycle	152	48.7	39.5
Buses	0	0.0	0.0

Table 5

**Distribution of BAC among Fatally Injured Drivers:
1983-1992 (seven provinces; death within 6 hours)**

Year	≥1 mg %	>80 mg %
1983	57.8	47.6
1984	56.0	45.7
1985	51.3	41.7
1986	51.0	43.6
1987	50.8	42.5
1988	49.8	39.7
1989	44.2	36.3
1990	41.7	34.6
1991	46.0	38.7
1992	48.0	41.1

Table 6

**Distribution of Fatally Injured Drivers with Illegal BAC by Sex:
1983-1992 (seven provinces; death within 6 hours)**

Sex	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Male	56.5	54.5	46.2	48.5	47.4	43.0	41.4	38.7	42.8	45.6
Female	27.0	25.0	22.1	22.8	21.9	21.9	16.8	18.4	22.4	22.6

Table 7

**Distribution of Fatally Injured Drivers with Illegal BAC by Age Group:
1983-1992 (seven provinces; death within 6 hours)**

Age Group	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Under 21	44.3	47.3	40.1	44.2	36.2	36.3	33.0	30.4	34.2	36.2
21-25	61.6	62.4	52.6	59.2	48.8	48.6	46.5	41.2	52.2	49.0
26-35	59.0	52.8	54.1	55.2	54.3	55.0	46.0	44.8	46.3	52.3
36-45	44.8	44.8	42.3	47.0	45.8	37.2	41.8	41.5	44.0	48.0
46+	26.8	22.1	21.4	20.0	27.5	21.4	19.3	19.9	23.7	24.1

Table 8

**Distribution of Fatally Injured Drivers with Illegal BAC by Vehicle Type:
1983-1992 (seven provinces; death within 6 hours)**

Vehicle Type	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Automobile	44.5	43.0	41.9	39.5	39.1	39.5	33.1	30.5	35.6	37.8
Van/Truck	59.3	52.0	43.2	53.1	52.1	44.8	46.8	45.0	47.4	51.9
Motorcycle	50.8	49.4	43.1	50.1	46.5	34.4	39.3	44.7	46.9	42.7



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January 1993

Table 1

Results of October 1992 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1983-1992

% of Car Drivers Wearing Shoulder Belts, Where Available

Prov.	1983 Oct.	1984 Oct.	1985 Oct.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.
Nfld.	75.9	69.7	65.5	61.4	64.6	72.4	64.6	84.2	91.6	90.6	93.9	94.8
P.E.I.	5.6	9.3	17.9	13.7	50.0	82.0	72.7	65.2	74.7	78.7	81.8	81.4
N.S.	12.1	20.2	80.8	79.8	68.6	73.4	79.1	83.4	83.9	86.3	85.5	86.3
N.B.	66.5	60.2	63.4	66.5	65.0	67.6	64.4	76.9	81.9	83.2	81.3	81.3
Que.	60.4	54.3	53.4	67.7	85.8	81.5	81.6	93.5	92.4	92.8	91.3	91.8
Ont.	60.1	61.9	66.4	65.9	67.6	70.3	70.8	71.6	79.7	83.2	80.5	84.1
Man.	11.1	61.6	53.6	61.3	64.6	66.0	79.3	73.4	79.4	79.9	81.6	80.2
Sask.	54.0	49.6	51.1	59.7	71.9	81.0	87.7	91.5	91.5	90.6	93.9	93.8
Alta.	18.2	19.8	24.4	27.8	74.3	82.5	44.6	88.1	84.4	83.2	86.3	84.8
B.C.	67.4	72.7	73.8	78.3	80.4	79.8	85.2	88.3	87.0	84.9	91.1	90.6
Y.T.									24.5*	74.8	58.8	84.0
N.W.T.									74.4*	75.6	64.7	69.5
Canada	52.0	54.9	58.4	63.2	74.0	75.8	73.9	81.9	85.1	86.0	85.9	87.1

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
October 1992

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	94.8	94.7	92.5	94.5
Prince Edward Island	81.4	74.0	47.6	76.3
Nova Scotia	86.3	84.7	72.7	84.6
New Brunswick	81.3	79.7	76.3	80.3
Quebec	91.8	85.9	85.0	90.8
Ontario	84.1	78.2	64.2	82.9
Manitoba	80.2	79.6	62.9	78.4
Saskatchewan	93.8	91.8	85.1	92.2
Alberta	84.8	84.5	68.4	81.9
British Columbia	90.6	88.5	76.7	88.4
Yukon	84.0	70.5	65.4	74.8
N.W.T.	69.5	75.0	48.1	65.8
Canada	87.1	83.8	73.4	85.7

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 19 to October 26, 1992.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by 1.1 percent to 87.1 percent in October 1992 from 86.0 percent in October 1991 (see Table 1). This estimate is accurate within ± 0.7 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- Newfoundland has become the first province to record a 95 percent seat belt use rate, up from 91 percent in 1991.
- Three other provinces also recorded belt use rates of over 90 percent. They were Saskatchewan with 94 percent, up three percent from a year ago. Quebec with 92 percent and British Columbia with 91 percent compared to 93 and 85 percent respectively in 1991.
- Alberta and Ontario achieved belt use rates of 85 and 84 percent respectively up from 83 percent last year.
- Nova Scotia and Manitoba observed belt use rate of 86 percent and 80 percent respectively unchanged from last year. Yukon's rate increased by nine percent to 84 percent while North West Territories fell six percent to 70 percent.
- New Brunswick and Prince Edward Island both observed belt use rates of 81 percent, compared to 83 and 79 percent respectively in 1991.

In this year's survey, all 10 provinces and Yukon achieved belt use rates of more than 80 percent. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 84 percent in passenger vans and 73 percent in light trucks from 83 and 70 percent respectively last year. Seat belt use by passenger van drivers varied from 71 percent in Yukon to 95 percent in Newfoundland; use by drivers of light trucks varied from 48 percent in P.E.I. and N.W.T. to 93 percent in Newfoundland. These two categories of vehicles accounted for 22 percent of the vehicles included in the survey.

Survey Method

The October 1992 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1983 to June 1992 surveys, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, weather conditions, type of vehicle, driver's sex and age group.

For further information write to:

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Evaluation and Data Systems,
Traffic Safety Standards and Research,
Transport Canada,
Canada Building,
13th Floor,
Ottawa, Ontario
K1A 0N5



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CHILDRENS' RESTRAINT SYSTEMS TEN YEARS OLD AND OLDER

Childrens' restraint systems reduce injuries and fatalities in motor vehicle accidents. They are mandatory in all the provinces and the two territories.

Over the years, however, the effectiveness of older restraint systems has become a concern.

Transport Canada has found that the majority of restraints ten (10) years and older do not have the necessary components, appropriate labels and instructions to ensure proper use.

A number of accident defect investigations involving the use of childrens' restraints have shown that mis-use and missing components were important factors which reduced the levels of performance of these safety devices.

In response to these concerns, Transport Canada has prepared the following reasons why the use of older restraint systems should be avoided:

1. The older child restraint system have normally been used by a number of parents and the statement of compliance labels and instructions for the proper use of the restraint are missing.
2. The older child restraints are often missing components such as the tether, crotch strap, adjustment hardware, etc.
3. The history of the older child restraints is not generally known as it could have been passed on by unrelated parties. Thus, the restraint could have been involved in a motor vehicle accident, abused, and mis-used, which could cause structural damage to the unit.
4. The manufacturers of older units seldom have replacement parts available, such as harnesses, pads and other components. In addition, the manufacturers will not issue a new statement of compliance label for an old restraint because they are unaware of its present condition.



5. Childrens' restraints are mainly made of plastic which over the years can suffer degradation due to ultraviolet light (i.e. sunlight). If the plastic does not have an inhibitor in it, the plastic can break down by becoming brittle and cracking.
6. The restraint systems manufactured prior to 1982 typically had buckles which were easy for children to unfasten.
7. The child restraints manufactured prior to 1983 were tested and certified to the applicable safety standards at the time.

Having stated the above, there are exceptions. Some child restraints have been used by one family, properly stored and have all the documentation. In addition, some of the rental agencies for infant carriers have units that are older (i.e. greater than ten (10) years) and they are in good shape with all the appropriate documentation.

In summary, from evaluating all the factors, it is not recommended, in general, that childrens' restraint systems older than ten (10) years be used.

Dated: August 09, 1993



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ADVISORY

FAN BLADES IN OLDER PASSENGER VEHICLES MAY BE HAZARDOUS



Transport Canada wishes to advise owners of all North American-built, eight-cylinder vehicles produced between 1970 and 1980 to contact their dealer concerning possible outstanding recalls related to failure of fuel-saving engine cooling fans.

Since 1970, more than 20 notices of defect have been issued by vehicle manufacturers to address fan failures in these vehicles.

One design of energy saving fan with flexible steel blades installed in North American vehicles during the 1970-80 period experienced unexpected premature failure due to design errors and damage caused by water pump failure, foreign object impact and corrosion.

In cases of failure, a portion of the fan blade cracks and flies off while the engine is running. When this occurs with the hood closed, radiators, batteries and coolant hoses are damaged; with the hood open, serious human injury is possible.

Drivers are warned that it is extremely dangerous to stand near the fan or rev up the engine with the hood open.

Owners whose vehicles are not subject to recall may still wish to have their vehicles checked at their dealership to determine if their engines are fitted with a flexible steel blade fan and, if so, have the fan checked for blade cracking.

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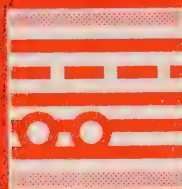
For further information, contact:

Mr. Paul C. Marriner
Chief, Public Complaints, Recalls
and Investigations
Road Safety, Ottawa
(613) 993-9851



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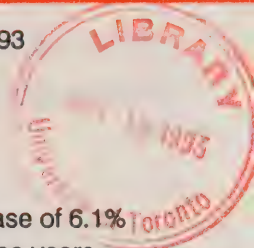
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April 1993



Preliminary Fatality Statistics

During 1992, 3460 road users were killed in reportable traffic collisions in Canada, a decrease of 6.1% over 1991 traffic fatalities and a decrease of 12.7% compared to the average fatalities in the last three years.

During this period, decreases in traffic fatalities were observed among all classes of road users. The number of motor vehicle drivers, motor vehicle passengers, pedestrians, motorcyclists and bicyclists killed in traffic collisions during 1992 (at 1750, 959, 429, 176 and 73) represented decreases of 1.5%, 0.9%, 19.5% 23.8% and 28.4% respectively over fatalities among the same road user classes during 1991.

1992 Preliminary Fatality Statistics

2004 Preliminary Funding Statistics														Percent Change		
														Annual Total	Last Year	Last 3 Years
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec				
Nfld.	4	0	1	3	4	6	4	3	4	3	6	1	39	-23.5	-44	
P.E.I.	0	0	0	0	2	0	1	4	3	1	0	1	12	-61.3	-53.8	
N.S.	6	2	6	9	10	8	17	15	11	9	15	5	113	-1.7	-11.7	
N.B.	9	10	7	5	7	14	6	29	14	12	8	10	131	11	-8.2	
QC	71	76	42	47	82	97	89	86	76	85	92	123	966	-4	-10.2	
Ont.	76	81	58	82	96	83	98	117	95	103	96	94	1079	-2.1	-7.7	
Man.	5	8	10	9	12	8	16	10	9	10	8	8	113	-5	-14.2	
Sask.	10	4	13	17	16	11	14	13	11	18	12	4	143	-15.9	-16.9	
Alta.	25	14	39	26	30	34	27	48	34	28	25	38	368	-12.6	-16.2	
B.C.	25	39	26	29	38	44	49	59	52	45	35	29	470	-12.5	-20.7	
Yukon	1	0	0	0	0	5	2	3	3	0	1	0	15	50	73.1	
N.W.T.	1	0	0	2	0	4	0	1	0	1	2	0	11	120	37.5	
Canada	233	234	202	229	297	314	323	388	312	315	300	313	3460	-6.1	-12.7	

1992 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for 1992.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	127	54	41	0	1	10	23
February	112	75	32	1	1	13	23
March	90	64	33	5	2	8	20
April	124	54	32	6	11	2	22
May	142	87	33	8	23	4	29
June	156	84	22	11	37	4	31
July	164	86	29	14	25	5	32
August	179	112	42	13	37	5	38
September	150	88	37	6	24	7	31
October	163	84	49	4	11	4	31
November	171	68	51	5	4	1	30
December	172	103	28	0	0	10	31
Total	1750	959	429	73	176	73	346

Fatality Trends By Road User Class and Province/Territory - 1991 - 1992

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for 1991 and 1992. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change	1991	1992	% Change
Nfld.	25	18	-28.0%	15	12	-20.0%	11	5	-54.5%	0	1	-	0	3	-
P.E.I.	15	8	-46.7%	9	2	-77.8%	3	2	-33.3%	1	0	-	3	0	-
N.S.	55	64	16.4%	38	33	-13.2%	17	12	-29.4%	1	1	-	4	2	-50.0%
N.B.	51	63	23.5%	33	42	27.3%	18	14	-22.2%	4	1	-75.0%	8	8	0.0%
QC	489	502	2.7%	226	225	-0.4%	146	121	-17.1%	38	25	-34.2%	77	55	-28.6%
Ont.	542	544	0.4%	298	313	5.0%	157	139	-11.5%	27	25	-7.4%	64	53	-17.2%
Man.	61	55	-9.8%	27	41	51.9%	21	11	-47.6%	2	2	0.0%	8	4	-50.0%
Sask.	83	71	-14.5%	49	51	4.1%	24	13	-45.8%	3	2	-33.3%	6	2	-66.7%
Alta.	191	189	-1.0%	119	110	-7.6%	59	32	-45.8%	12	8	-33.3%	19	15	-21.1%
B.C.	254	221	-13.0%	152	124	-18.4%	76	75	-1.3%	13	8	-38.5%	41	34	-17.1%
Yuk.	6	11	83.3%	2	3	50.0%	1	1	-	1	0	-	0	0	-
N.W.T.	5	4	-20.0%	0	3	-	0	4	-	0	0	-	1	0	-
Canada	1777	1750	-1.5%	968	959	-0.9%	533	429	-19.5%	102	73	-28.4%	231	176	-23.8%

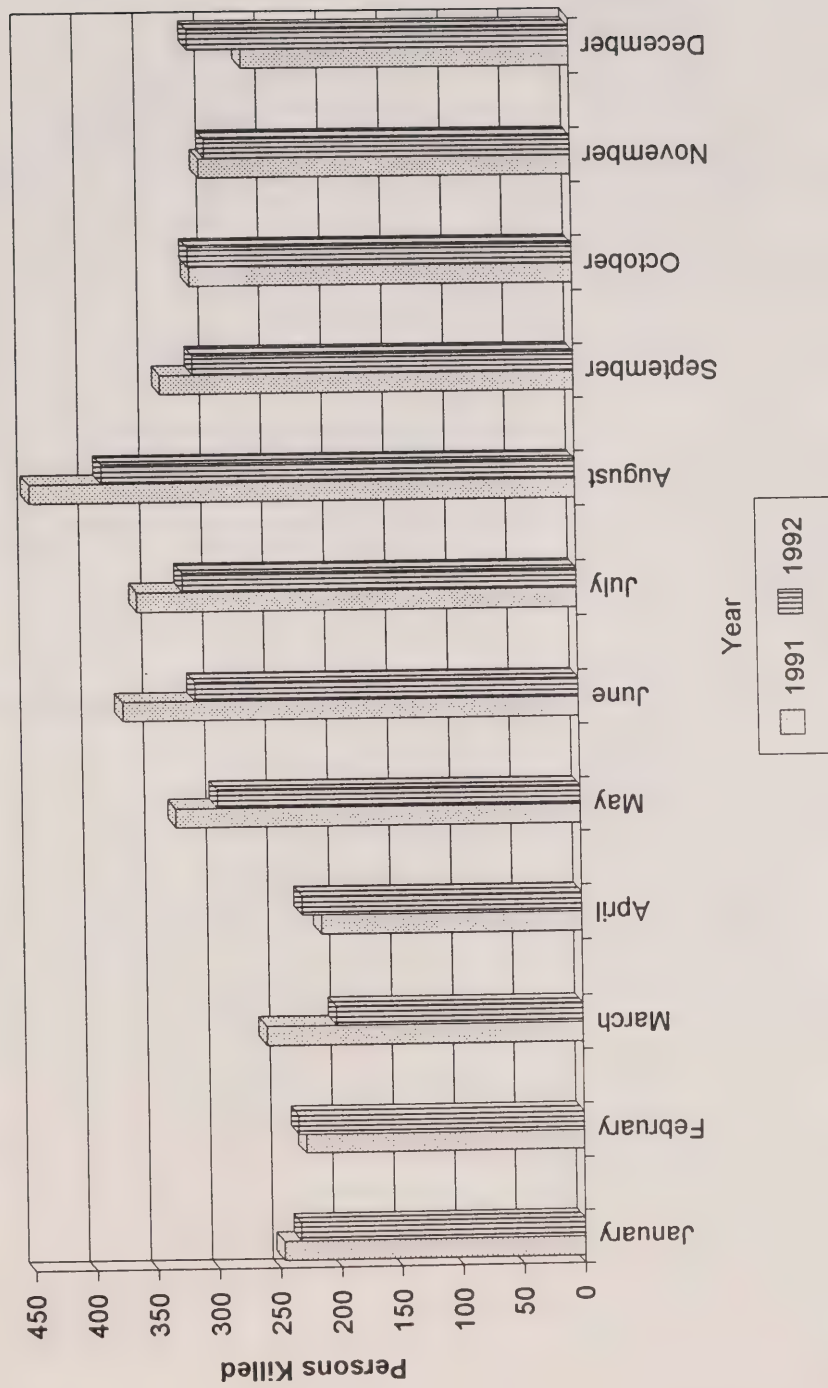
National Trend in Monthly Fatalities

January 1991 - December 1992

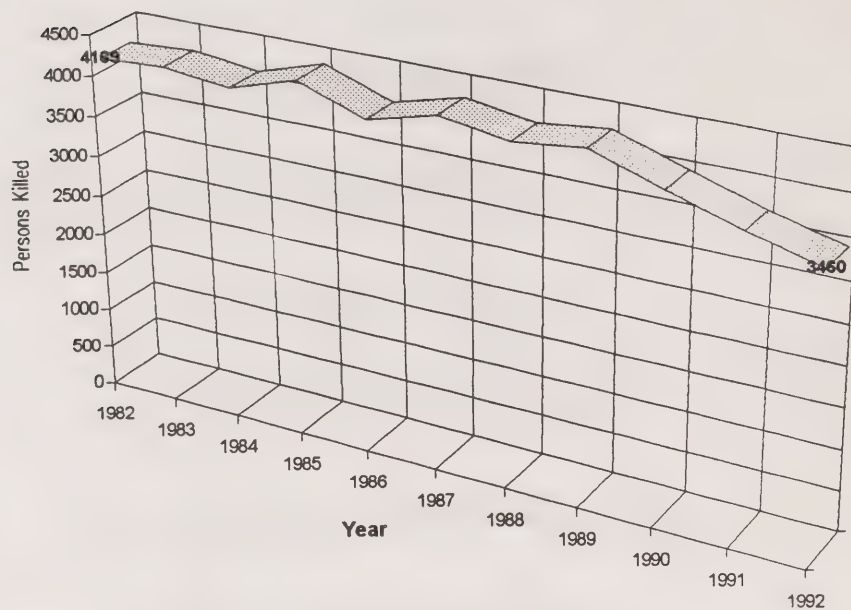
The following table and graph summarize fatalities for the last 12-month period (January 1992 - December 1992) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1991	1992	1992/1991
January	247	233	-5.7%
February	228	234	2.6%
March	259	202	-22.0%
April	213	229	7.5%
May	331	297	-10.3%
June	373	314	-15.8%
July	360	323	-10.3%
August	447	388	-13.2%
September	339	312	-8.0%
October	314	315	0.3%
November	305	300	-1.6%
December	269	313	16.4%
12 Month Total	3685	3460	-6.1%

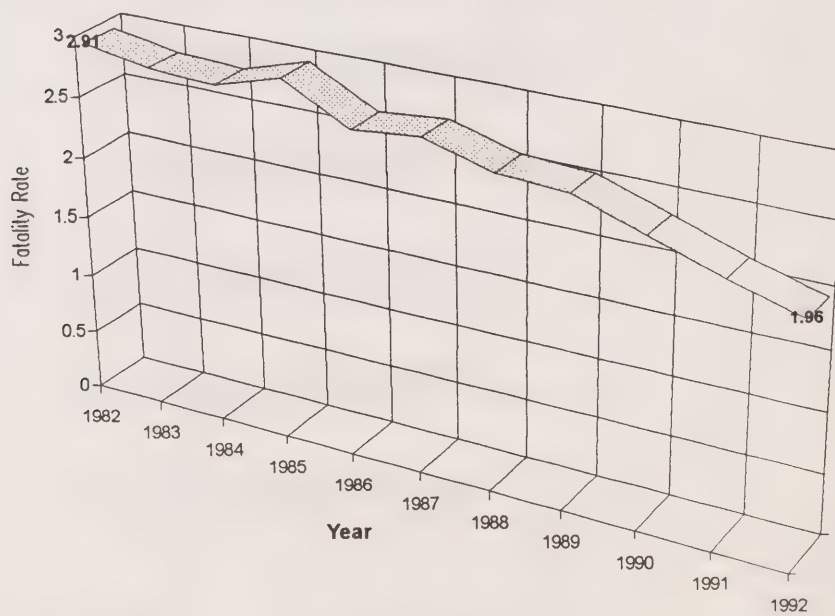
Persons Killed In Traffic Collisions By Month - Canada - 1991 - 1992



Persons Killed In Traffic Collisions In Canada - 1982 - 1992



Persons Killed Per 10,000 Motor Vehicles Registered - Canada - 1982 - 1992



Note: 1992 figure is preliminary.



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Road Safety

Sécurité routière

LEAFLET

TP 2436

FEUILLET

August 1993

Table 1

Results of June 1993 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1984-1993

% of Car Drivers Wearing Shoulder Belts, Where Available

Prov.	1984 Oct.	1985 Oct.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.	1993 June
Nfld.	69.7	65.5	61.4	64.6	72.4	64.6	84.2	91.6	90.6	93.9	94.8	96.7
P.E.I.	9.3	17.9	13.7	50.0	82.0	72.7	65.2	74.7	78.7	81.8	81.4	83.4
N.S.	20.2	80.8	79.8	68.6	73.4	79.1	83.4	83.9	86.3	85.5	86.3	87.4
N.B.	60.2	63.4	66.5	65.0	67.6	64.4	76.9	81.9	83.2	81.3	81.3	85.6
Que.	54.3	53.4	67.7	85.8	81.5	81.6	93.5	92.4	92.8	91.3	91.8	92.6
Ont.	61.9	66.4	65.9	67.6	70.3	70.8	71.6	79.7	83.2	80.5	84.1	84.0
Man.	61.6	53.6	61.3	64.6	66.0	79.3	73.4	79.4	79.9	81.6	80.2	82.9
Sask.	49.6	51.1	59.7	71.9	81.0	87.7	91.5	91.5	90.6	93.9	93.8	93.7
Alta.	19.8	24.4	27.8	74.3	82.5	44.6	88.1	84.4	83.2	86.3	84.8	86.6
B.C.	72.7	73.8	78.3	80.4	79.8	85.2	88.3	87.0	84.9	91.1	90.6	91.4
Y.T.								24.5*	74.8	58.8	84.0	80.8
N.W.T.								74.4*	75.6	64.7	69.5	59.8
Canada	54.9	58.4	63.2	74.0	75.8	73.9	81.9	85.1	86.0	85.9	87.1	87.8

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.



Ce feuillet est aussi disponible dans la
deuxième langue officielle.

This leaflet is also available in the other
official language.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
June 1993

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	96.7	96.0	93.7	96.4
Prince Edward Island	83.4	79.4	52.3	78.3
Nova Scotia	87.4	83.8	72.0	85.4
New Brunswick	85.6	83.2	73.9	83.7
Quebec	92.6	87.0	84.7	91.6
Ontario	84.0	83.0	68.9	82.9
Manitoba	82.9	81.0	70.4	81.7
Saskatchewan	93.7	89.7	83.1	91.2
Alberta	86.6	84.6	67.7	82.9
British Columbia	91.4	89.3	77.6	89.4
Yukon	80.8	77.6	65.3	75.1
N.W.T.	59.8	55.2	41.6	52.6
Canada	87.8	85.3	74.2	86.2

Transport Canada's latest annual survey of seat belt use was undertaken during the week of June 21 to June 27, 1993.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by 1.9 percent to 87.8 percent in June 1993 from 85.9 percent in June 1992 (see Table 1). This estimate is accurate within ± 0.8 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- Newfoundland has become the first province to record a 97 percent seat belt use rate, up from 94 percent in 1992.
- Three other provinces also recorded belt use rates of more than 90 percent. Saskatchewan's was 94 percent, unchanged from a year ago. Quebec with 93 percent and British Columbia with 91 percent compared to 92 and 91 percent respectively in 1992.
- Alberta and Nova Scotia both recorded belt use rate of 87 percent, up from 86 percent last year.
- New Brunswick and Ontario achieved belt use rates of 86 and 84 percent respectively up from 81 percent last year.
- Manitoba and Prince Edward Island both recorded belt use rates of 83 percent, up from 82 percent last year.
- Yukon's rate increased by 22 percent to 81 percent while North West Territories fell 10 percent to 60 percent.

In this year's survey, all 10 provinces and Yukon achieved belt use rates of more than 80 percent. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 85 percent in passenger vans and 74 percent in light trucks compared to 85 and 70 percent respectively last year. Seat belt use by passenger van drivers varied from 55 percent in N.W.T. to 96 percent in Newfoundland; use by drivers of light trucks varied from 42 percent in N.W.T. to 94 percent in Newfoundland. These two categories of vehicles accounted for 23.7 percent of the vehicles included in the survey.

Survey Method

The June 1993 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1983 to 1992 surveys. From 1992, Transport Canada has started undertaking two belt use surveys in a year. The first survey is conducted during the month of June and the second survey during the month of October. The June survey collects information on belt use by all occupants of the vehicle but without such variables as sex and age of occupant and light use of the vehicle. The October survey collects information on belt use by drivers only with the usual demographic information on age and sex of driver and light use of the vehicle.

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LEAFLET

TP 2436

FEUILLET

November 1993

Preliminary Fatality Statistics

During the first six months of 1993, there were 1,433 road users killed in Canada, a decrease of 5.0% over the number of traffic deaths recorded during the same period last year, and a decrease of 11.7% compared to the average number of fatalities for this period during the last three years.

During this period, the number of motor vehicle drivers, motor vehicle passengers and bicyclists (at 737, 363 and 20) decreased by 1.7%, 13.2% and 35.5% respectively over fatalities among the same classes of road users during the first six months of 1992. The number of motorcyclists killed during the first six months of 1993 (at 81) represented a 9.5% increase over fatalities among the same road user class during this period in 1992, while the number of pedestrians killed (at 193) was identical to the number that died in traffic collisions during the same period in 1992.

The projected traffic fatality total for Canada during 1993 is 3,287. This total represents a decrease of 5.7% over the number of road users killed in 1992 and an 11.5% decrease compared to the average number of traffic fatalities during the last three years.

1993 Preliminary Fatality Statistics									Percent Change	
	Month						Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
	Jan	Feb	Mar	Apr	May	June				
Nfld.	4	2	0	3	2	1	12	26	-36,8	-52,6
P.E.I.	3	1	0	3	1	2	10	32	400,0	30,4
N.S.	4	5	5	7	5	6	32	80	-22,0	-36,4
N.B.	8	8	7	7	14	14	58	145	11,5	7,4
QC	54	63	59	47	76	106	405	889	-2,4	-12,8
Ont.	79	77	68	65	82	69	440	1031	-6,8	-6,6
Man.	8	5	6	3	13	4	39	91	-27,8	-24,0
Sask.	8	3	13	17	13	12	66	150	-7,0	-3,9
Alta.	28	21	22	16	28	25	140	314	-16,7	-21,3
B.C.	34	29	32	34	35	59	223	510	10,4	-8,1
Yukon	1	1	1	0	0	3	6	15	0,0	38,5
N.W.T.	0	0	1	1	0	0	2	4	-71,4	-50,0
Canada	231	215	214	203	269	301	1433	3287	-5,0	-11,7

1993 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary fatality estimates by road user class and month of occurrence first six months of 1993.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	123	59	43	0	0	6	231
February	101	62	32	1	1	18	215
March	114	53	33	1	5	8	214
April	111	49	30	5	7	1	203
May	141	71	27	5	21	4	269
June	147	69	28	8	47	2	301
Total	737	363	193	20	81	39	1433

Fatality Trends By Road User Class and Province/Territory - 1992 - 1993

The following table presents comparisons of fatalities by road user class and province/territory for the first six months of 1992 and 1993. This table includes only fatally injured victims whose road user class was known.

	MOTOR VEHICLE DRIVERS			MOTOR VEHICLE PASSENGERS			PEDESTRIANS			BICYCLISTS			MOTORCYCLISTS		
	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change
NFLD	7	5	-28.6%	6	3	-50.0%	4	2	-50.0%	0	0	-	1	1	0.0%
P.E.I.	1	7	600.0%	1	2	100.0%	0	1	-	0	0	-	0	0	-
N.S.	22	16	-27.3%	14	9	-35.7%	3	5	66.7%	0	1	-	1	1	0.0%
N.B.	24	29	20.8%	21	16	-23.8%	4	8	100.0%	0	0	-	3	4	33.3%
QUE.	215	214	-0.5%	82	81	-1.2%	50	54	8.0%	12	4	-66.7%	29	28	-3.4%
ONT	241	230	-4.6%	136	109	-19.9%	66	60	-9.1%	11	11	0.0%	19	25	31.6%
MAN.	20	19	-5.0%	27	11	-59.3%	5	7	40.0%	0	1	-	0	1	-
SASK.	38	36	-5.3%	25	16	-36.0%	2	6	200.0%	1	0	-	1	4	300.0%
ALTA	84	78	-7.1%	55	36	-34.5%	16	19	18.8%	4	2	-50.0%	5	4	-20.0%
B.C.	92	98	6.5%	47	78	66.0%	41	31	-24.4%	3	1	-66.7%	15	13	-13.3%
YUK.	5	4	-20.0%	1	1	0.0%	0	0	-	0	0	-	0	0	-
N.W.T.	1	1	0.0%	3	1	-66.7%	2	0	-	0	0	-	0	0	-
CANADA	750	737	-1.7%	418	363	-13.2%	193	193	0.0%	31	20	-35.5%	74	81	9.5%

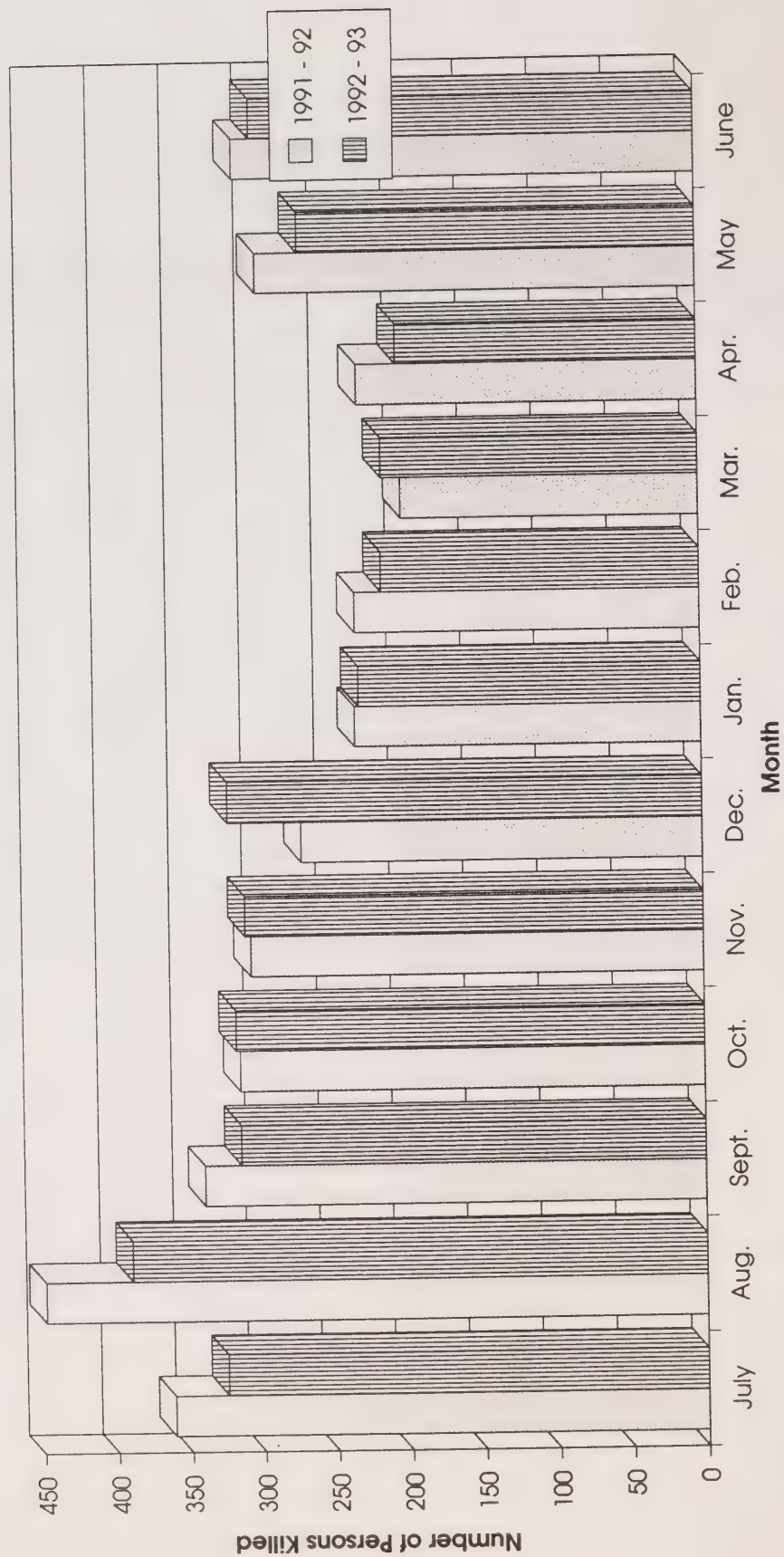
National Trend in Monthly Fatalities

July 1991 - June 1993

The following table and graph summarize fatalities for the last 12-month period (July 1992 - June 1993) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1991	1992	1992/1991
July	361	325	-10,0%
August	448	389	-13,2%
September	339	314	-7,4%
October	314	317	1,0%
November	306	310	1,3%
December	271	321	18,5%
	1992	1993	1993/1992
January	234	231	-1,3%
February	233	215	-7,7%
March	201	214	6,5%
April	230	203	-11,7%
May	298	269	-9,7%
June	313	301	-3,8%
Jan. - June Total	1509	1433	-5,0%
12 Month Total	3548	3409	-3,9%

Persons Killed In Traffic Collisions In Canada - 1991 - 92 - 1992 - 93



A1
 260
 L21

January 1994

Table 1

Results of October 1993 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1985-1993

% of Car Drivers Wearing Shoulder Belts, Where Available

	1985 Oct.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.	1993 June	1993 Oct.
d.	65.5	61.4	64.6	72.4	64.6	84.2	91.6	90.6	93.9	94.8	96.7	97.5
I.	17.9	13.7	50.0	82.0	72.7	65.2	74.7	78.7	81.8	81.4	83.4	81.5
	80.8	79.8	68.6	73.4	79.1	83.4	83.9	86.3	85.5	86.3	87.4	86.3
	63.4	66.5	65.0	67.6	64.4	76.9	81.9	83.2	81.3	81.3	85.6	86.2
	53.4	67.7	85.8	81.5	81.6	93.5	92.4	92.8	91.3	91.8	92.6	92.6
	66.4	65.9	67.6	70.3	70.8	71.6	79.7	83.2	80.5	84.1	84.0	83.6
	53.6	61.3	64.6	66.0	79.3	73.4	79.4	79.9	81.6	80.2	82.9	83.3
k.	51.1	59.7	71.9	81.0	87.7	91.5	91.5	90.6	93.9	93.8	93.7	95.4
a.	24.4	27.8	74.3	82.5	44.6	88.1	84.4	83.2	86.3	84.8	86.6	88.3
	73.8	78.3	80.4	79.8	85.2	88.3	87.0	84.9	91.1	90.6	91.4	91.3
							24.5*	74.8	58.8	84.0	80.8	78.3
							74.4*	75.6	64.7	69.5	59.8	60.2
T.												
ada	58.4	63.2	74.0	75.8	73.9	81.9	85.1	86.0	85.9	87.1	87.8	87.8

Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
October 1993

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	97.5	97.4	96.6	96.9
Prince Edward Island	81.5	81.3	45.2	76.5
Nova Scotia	86.3	85.3	78.9	85.7
New Brunswick	86.2	76.8	73.5	83.6
Quebec	92.6	93.2	83.9	92.5
Ontario	83.6	83.9	67.4	83.2
Manitoba	83.3	80.8	68.1	81.2
Saskatchewan	95.4	93.8	88.9	94.7
Alberta	88.3	87.7	75.2	87.0
British Columbia	91.3	89.1	82.6	90.6
Yukon	78.3	69.7	66.8	72.1
N.W.T.	60.2	59.9	53.6	58.5
Canada	87.8	87.2	75.7	87.0

Transport Canada's latest annual survey of seat belt use was undertaken during the week of October 18 to October 24, 1993.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by 0.7 percent to 87.8 percent in October 1993 from 87.1 percent in October 1992 (see Table 1). This estimate is accurate within \pm 1.0 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- Two provinces have reached or surpassed a 95 percent seat belt use rate. Newfoundland with 98 percent and Saskatchewan with 95 percent, up from 95 and 94 percent respectively in 1992.
- Two other provinces also recorded belt use rates of more than 90 percent. Quebec with 93 percent and British Columbia with 91 percent compared to 92 and 91 percent respectively in 1992.
- Alberta and New Brunswick recorded belt use rates of 88 and 86 percent respectively, up from 85 and 81 percent respectively last year.
- Nova Scotia and Ontario achieved belt use rates of 86 and 84 percent respectively unchanged from last year.
- Manitoba and Prince Edward Island recorded belt use rates of 83 and 82 percent respectively, up from 80 and 81 percent respectively last year.
- Yukon and North West Territories belt use rates fell 6 and 10 percent respectively to 78 and 60 percent respectively.

In this year's survey, all 10 provinces achieved belt use rates of more than 80 percent. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 87 percent in passenger vans and 76 percent in light trucks compared to 84 and 73 percent respectively last year. Seat belt use by passenger van drivers varied from 60 percent in N.W.T. to 97 percent in Newfoundland; use by drivers of light trucks varied from 54 percent in N.W.T. to 97 percent in Newfoundland. These two categories of vehicles accounted for 23.2 percent of the vehicles included in the survey.

Survey Method

The October 1993 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1983 to 1992 surveys. From 1992, Transport Canada has started undertaking two belt use surveys in a year. The first survey is conducted during the month of June and the second survey during the month of October. The June survey collects information on belt use by all occupants of the vehicle but without such variables as sex and age of occupant and light use of the vehicle. The October survey collects information on belt use by drivers only with the usual demographic information on age and sex of driver and light use of the vehicle.

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Transport
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Transports
Canada

Road Safety Sécurité routière



CL9402 (e)

LEAFLET

TP 2436

FEUILLET

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June 1994

Preliminary Fatality Statistics

During 1993, 3,550 road users were killed in reportable traffic collisions in Canada, an increase of 1.4% over 1992 traffic fatalities and a decrease of 4.5% compared to the average fatalities in the last three years.

During this period, the number of motor vehicle drivers, pedestrians, motorcyclists and bicyclists killed in traffic collisions (at 1,798, 459, 201 and 81) increased by 2.6%, 3.4%, 9.8% and 8.0% respectively, while the number of motor vehicle passengers killed (at 947) decreased by 2.4% when compared to fatalities among the same road user classes during 1992.

1993 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	4	3	0	3	2	2	2	4	1	8	5	7	41	-8.9	-25.5
P.E.I.	3	1	0	3	1	2	3	1	2	4	0	0	20	53.8	-17.8
N.S.	4	5	5	7	5	6	13	16	6	14	3	16	100	-11.5	-20.4
N.B.	8	8	7	9	14	14	15	16	7	8	13	20	139	6.1	3.0
Que.	59	63	60	49	75	109	143	93	80	80	77	84	972	-0.9	-5.2
Ont.	73	83	66	70	99	79	121	113	103	101	91	87	1086	-0.4	-1.6
Man.	8	7	6	4	15	5	21	8	8	22	9	21	134	13.6	12.3
Sask.	8	3	13	17	13	15	16	18	11	13	12	14	153	7.0	-1.7
Alta.	28	21	23	17	28	27	32	33	43	43	47	38	380	3.3	-4.8
B.C.	34	29	33	34	36	59	44	56	62	29	50	46	512	8.2	-7.7
Yukon	1	1	1	0	0	3	0	1	0	1	0	0	8	-46.7	-27.3
N.W.T.	0	1	1	1	0	0	1	0	0	0	1	0	5	-54.5	-37.5
Canada	230	225	215	214	288	321	411	359	323	323	308	333	3550	1.4	-4.5

1993 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of for 1993.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	122	60	41	0	0	7	230
February	108	66	33	1	1	16	225
March	115	53	33	1	5	8	215
April	118	52	30	5	8	2	215
May	149	82	27	5	21	3	287
June	158	76	30	8	47	4	323
July	195	114	34	16	46	5	410
August	155	105	41	16	40	2	359
September	161	80	44	14	20	3	322
October	189	69	44	6	13	2	323
November	157	92	52	6	0	1	308
December	171	98	50	3	0	11	333
Total	1798	947	459	81	201	64	3550

Fatality Trends By Road User Class and Province/Territory - 1992 - 1993

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for 1992 and 1993. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change	1992	1993	% Change
Nfld.	19	25	31.6%	13	8	-38.5%	6	6	0.0%	1	0	-100.0%	4	0	-100.0%
P.E.I.	8	11	37.5%	3	6	100.0%	2	3	50.0%	0	0	-	0	0	-
N.S.	63	54	-14.3%	30	32	6.7%	12	7	-41.7%	1	2	100.0%	4	5	25.0%
N.B.	64	67	4.7%	37	38	2.7%	14	20	42.9%	1	1	0.0%	8	10	25.0%
Que.	505	488	-3.4%	229	225	-1.7%	130	132	1.5%	25	23	-8.0%	51	61	19.6%
Ont.	548	583	6.4%	317	282	-11.0%	140	133	-5.0%	27	30	11.1%	53	58	9.4%
Man.	56	64	14.3%	44	43	-2.3%	12	17	41.7%	2	5	150.0%	4	5	25.0%
Sask.	71	82	15.5%	51	37	-27.5%	13	21	61.5%	2	2	0.0%	2	5	150.0%
Alta.	185	195	5.4%	115	104	-9.6%	34	50	47.1%	8	7	-12.5%	18	21	16.7%
B.C.	222	222	0.0%	125	170	36.0%	76	70	-7.9%	8	10	25.0%	35	36	2.9%
Yuk.	7	5	-28.6%	3	1	-66.7%	1	0	-100.0%	0	1	-	4	0	-100.0%
N.W.T.	4	2	-50.0%	3	1	-66.7%	4	0	-100.0%	0	0	-	0	0	-
Canada	1752	1798	2.6%	970	947	-2.4%	444	459	3.4%	75	81	8.0%	183	201	9.8%

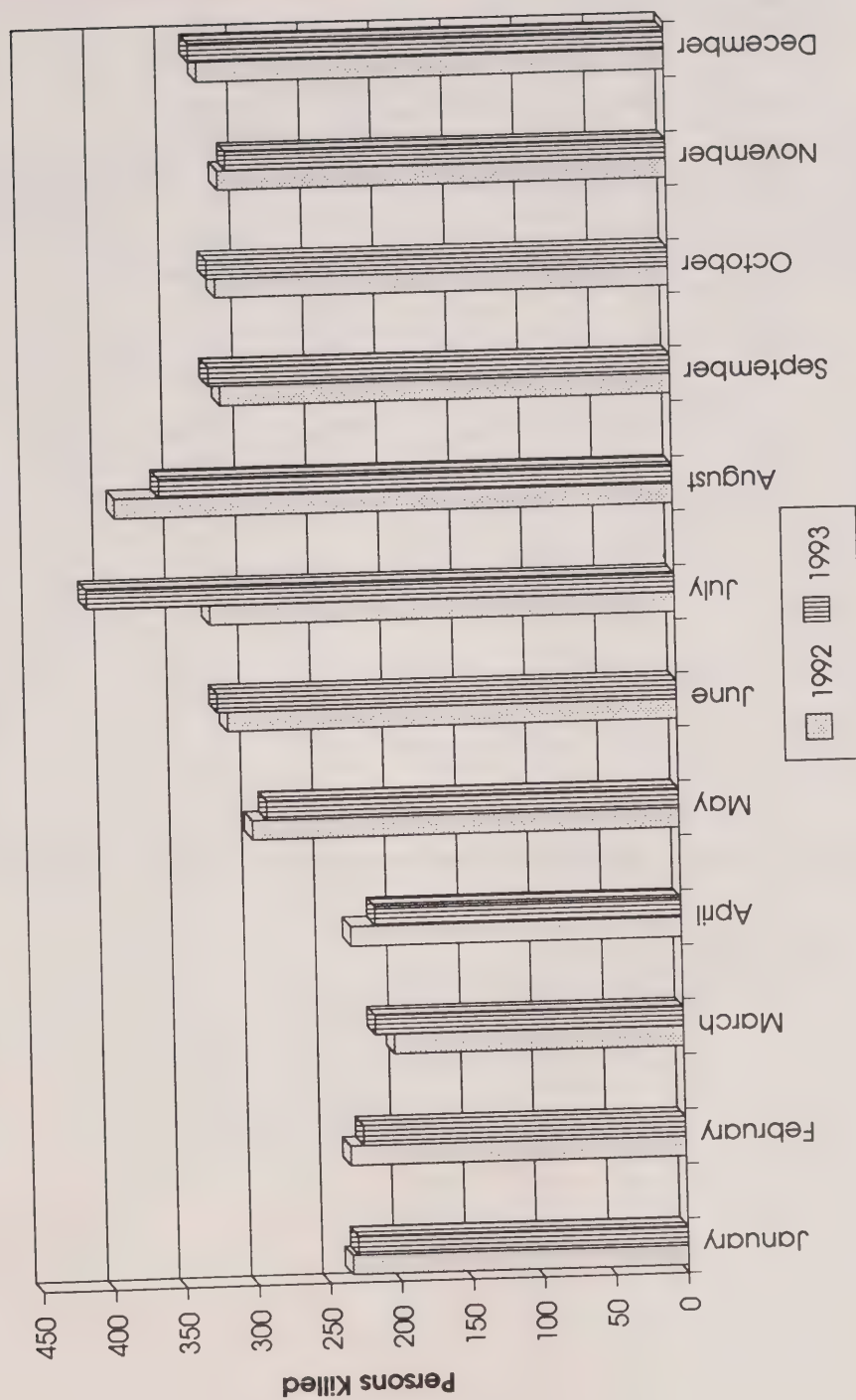
National Trend in Monthly Fatalities

January 1992 - December 1993

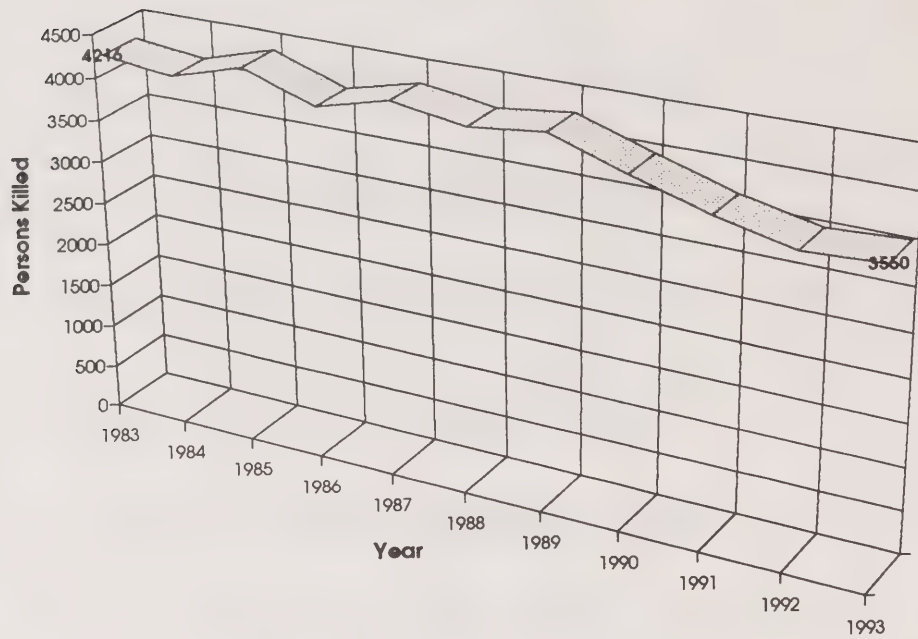
The following table and graph summarize fatalities for the last 12-month period (January 1993 - December 1993) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1992	1993	1993/1992
January	234	230	-1.7%
February	234	225	-3.8%
March	202	215	6.4%
April	231	214	-7.4%
May	298	288	-3.4%
June	314	321	2.2%
July	325	411	26.5%
August	390	359	-7.9%
September	315	323	2.5%
October	317	323	1.9%
November	314	308	-1.9%
December	327	333	1.8%
12 Month Total	3501	3550	1.4%

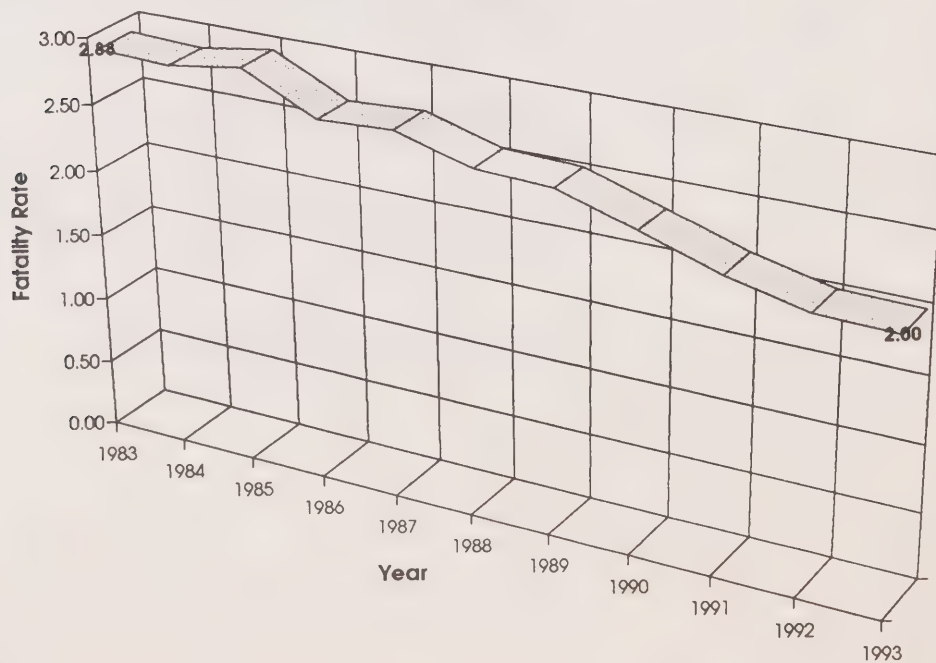
Persons Killed In Traffic Collisions By Month - Canada - 1992 - 1993



Persons Killed In Traffic Collisions In Canada - 1983 - 1993



Persons Killed Per 10,000 Motor Vehicles Registered - Canada - 1983 - 1993

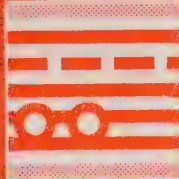


Note: 1993 figure is preliminary.



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CL 9405 (E)

Road Safety

Sécurité routière

LEAFLET

TP 2436

FEUILLET

August 1994

Table 1

Results of June 1994 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1986-1994

% of Car Drivers Wearing Shoulder Belts, Where Available

ov.	1986 Oct.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.	1993 June	1993 Oct.	1994 June
ld.	61.4	64.6	72.4	64.6	84.2	91.6	90.6	93.9	94.8	96.7	97.5	95.7
E.I.	13.7	50.0	82.0	72.7	65.2	74.7	78.7	81.8	81.4	83.4	81.5	90.2
S.	79.8	68.6	73.4	79.1	83.4	83.9	86.3	85.5	86.3	87.4	86.3	87.0
B.	66.5	65.0	67.6	64.4	76.9	81.9	83.2	81.3	81.3	85.6	86.2	88.9
e.	67.7	85.8	81.5	81.6	93.5	92.4	92.8	91.3	91.8	92.6	92.6	92.1
t.	65.9	67.6	70.3	70.8	71.6	79.7	83.2	80.5	84.1	84.0	83.6	88.8
n.	61.3	64.6	66.0	79.3	73.4	79.4	79.9	81.6	80.2	82.9	83.3	86.1
sk.	59.7	71.9	81.0	87.7	91.5	91.5	90.6	93.9	93.8	93.7	95.4	92.7
ta.	27.8	74.3	82.5	44.6	88.1	84.4	83.2	86.3	84.8	86.6	88.3	87.8
C.	78.3	80.4	79.8	85.2	88.3	87.0	84.9	91.1	90.6	91.4	91.3	92.7
T.						24.5*	74.8	58.8	84.0	80.8	78.3	67.6
W.T.						74.4*	75.6	64.7	69.5	59.8	60.2	75.5
Canada	63.2	74.0	75.8	73.9	81.9	85.1	86.0	85.9	87.1	87.8	87.8	90.1

Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
June 1994

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	95.7	95.7	94.6	95.6
Prince Edward Island	90.2	81.8	52.9	84.5
Nova Scotia	87.0	83.1	66.8	84.7
New Brunswick	88.9	88.6	78.4	87.9
Quebec	92.1	91.6	82.9	91.6
Ontario	88.8	89.5	77.8	88.2
Manitoba	86.1	82.2	67.9	84.0
Saskatchewan	92.7	90.0	78.9	90.4
Alberta	87.8	87.1	69.0	84.9
British Columbia	92.7	90.7	75.9	90.5
Yukon	67.6	74.3	69.6	69.9
N.W.T.	75.5	76.3	66.0	74.0
Canada	90.1	89.4	76.3	88.7

Transport Canada's latest semi-annual survey of seat belt use was undertaken during the week of June 13 to June 19, 1994.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased 2.3 percent to 90.1 percent in June 1994, up from 87.8 percent in June 1993 (see Table 1). This estimate is accurate within ± 0.7 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- A seat belt use increase of 4.8 percent by drivers in Ontario impacted significantly on the national average. Because 38 percent of all registered passenger cars are in Ontario, the provincial increase had the effect of raising the national average by two percent. Ontario's use went from 84.0 to 88.8 percent.
- A record five provinces achieved seat belt use rates of more than 90 percent, up from four a year ago.
- Newfoundland recorded a belt use rate of 96 percent, highest level in the country. Saskatchewan and British Columbia were identical at 93, followed by Quebec at 92.
- Prince Edward Island registered 90 percent for the first time. The rate showed the largest increase over 1993 of any province. It jumped 7 percent.
- Alberta, Manitoba and New Brunswick recorded belt use rates of 88, 86 and 89 percent respectively, up from 87, 83 and 86 percent last year.
- Nova Scotia recorded belt use rate of 87 percent unchanged from last year.
- North West Territories belt use rate increased 15.7 to 75.5 percent, while the Yukon belt use rate fell by 13.2 to 67.6 percent.

In this year's survey, all 10 provinces achieved belt use rates of more than 86 percent, the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As for last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 89 percent in passenger vans and 76 percent in light trucks compared to 85 and 74 percent respectively last year. Seat belt use by passenger van drivers varied from 74 percent in Yukon to 96 percent in Newfoundland; use by drivers of light trucks varied from 53 percent in P.E.I. to 95 percent in Newfoundland. These two categories of vehicles accounted for 23.9 percent of the vehicles included in the survey.

Survey Method

The June 1994 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1983 to 1992 surveys. Since 1992, Transport Canada has undertaken two belt use surveys per year. The first survey is conducted during June and the second survey during October. The June survey collects information on belt use by all occupants of the vehicle, but without such variables as sex and age of occupant, and light use of the vehicle. The October survey collects information on belt use by drivers only, with the usual demographic information on age and sex of driver and light use of the vehicle.

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Consultation
Publique

CL 9408 (e)

LEAFLET

TP 2436

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November 1994

Preliminary Fatality Statistics

During the first six months of 1994, 1304 road users died in reportable traffic collisions in Canada, a decrease of 13.3% over the number of traffic deaths recorded during the same period last year, and a decrease of 16.2% compared to the average number of fatalities for this period during the last three years.

During this period, the number of motor vehicle drivers, motor vehicle passengers, pedestrians, and motorcyclists killed in traffic collisions (at 687, 337, 169 and 47) decreased by 10.8%, 14.0%, 15.1% and 42.0% respectively, while the number of cyclists killed (at 29) increased by 45.0% when compared to fatalities among the same road user classes during the same period in 1993.

The projected traffic fatality total for Canada during 1994 is 3021. This total represents a decrease of 16.1% over the number of road users killed in 1993 and a 16.0% decrease compared to the average number of traffic fatalities during the last three years.

1994 Preliminary Fatality Statistics									Percent Change	
	Month						Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
	Jan	Feb	Mar	Apr	May	June				
Nfld.	1	2	2	1	2	2	10	24	-28.6	-50.0
P.E.I.	3	0	2	0	1	3	9	24	-10.0	12.5
N.S.	4	1	3	8	8	6	30	73	-6.3	-33.3
N.B.	4	2	1	6	6	8	27	63	-55.0	-51.5
Que.	60	54	40	41	62	70	327	737	-21.2	-25.5
Ont.	72	61	69	69	77	71	419	986	-13.1	-11.1
Man.	0	3	3	11	8	9	34	80	-24.4	-35.0
Sask.	8	6	5	6	9	15	49	109	-29.0	-29.7
Alta.	29	20	19	20	45	34	167	394	16.0	1.2
B.C.	46	37	28	28	47	41	227	521	0.9	2.7
Yukon	0	0	1	0	2	1	4	8	-33.3	-29.4
N.W.T.	0	0	0	0	1	0	1	2	-50.0	-75.0
Canada	227	186	173	190	268	260	1304	3021	-13.3	-16.2

1994 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for the first six months of 1994.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	119	61	31	1	0	15	227
February	100	44	37	1	0	5	187
March	92	51	25	1	1	3	173
April	96	43	29	5	11	6	190
May	140	65	30	11	18	3	267
June	140	73	17	10	17	3	260
Total	687	337	169	29	47	35	1304

Fatality Trends By Road User Class and Province/Territory - 1993 - 1994

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for the first six months of 1993 and 1994. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change
Nfld.	8	4	-50.0%	3	4	33.3%	3	0	-100.0%	0	0	-	1	2	100.0%
P.E.I.	6	5	-16.7%	3	3	0.0%	1	0	-100.0%	0	0	-	0	0	-
N.S.	17	16	-5.9%	9	7	-22.2%	5	4	-20.0%	1	0	-100.0%	0	3	-
N.B.	30	16	-46.7%	17	7	-58.8%	8	2	-75.0%	0	1	-	4	1	-75.0%
Que.	219	176	-19.6%	83	66	-20.5%	55	46	-16.4%	4	12	200.0%	24	6	-75.0%
Ont.	251	235	-6.4%	128	105	-18.0%	62	52	-16.1%	11	7	-36.4%	26	15	-42.3%
Man.	22	17	-22.7%	13	8	-38.5%	8	4	-50.0%	1	3	200.0%	1	2	100.0%
Sask.	37	28	-24.3%	18	12	-33.3%	6	5	-16.7%	0	0	-	4	1	-75.0%
Alta.	77	90	16.9%	38	44	15.8%	19	21	10.5%	2	3	50.0%	7	6	-14.3%
B.C.	98	98	0.0%	79	78	-1.3%	32	35	9.4%	1	3	200.0%	14	11	-21.4%
Yuk.	4	2	-50.0%	1	2	100.0%	0	0	-	0	0	-	0	0	-
N.W.T.	1	0	-100.0%	0	1	-	0	0	-	0	0	-	0	0	-
Canada	770	687	-10.8%	392	337	-14.0%	199	169	-15.1%	20	29	45.0%	81	47	-42.0%

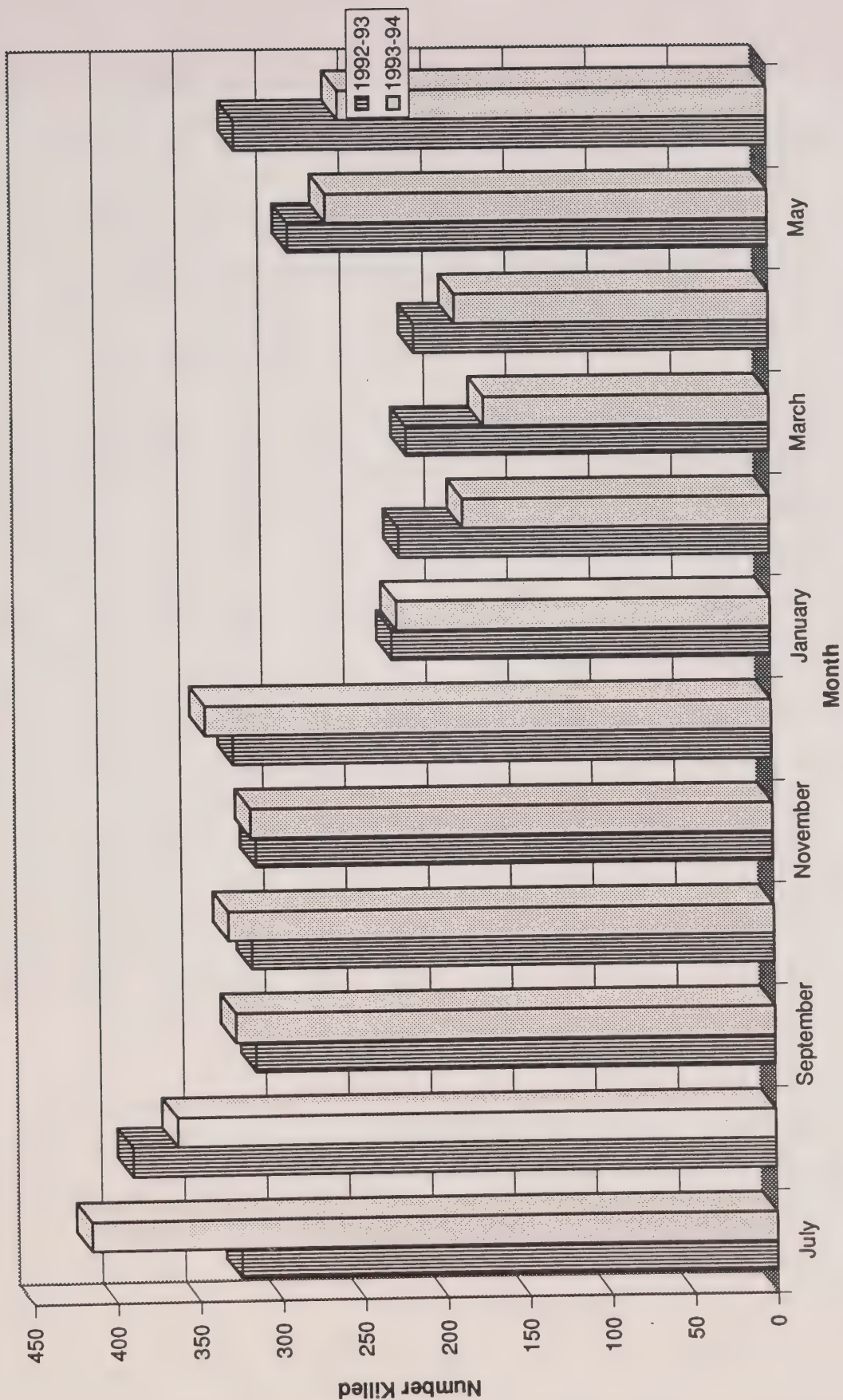
National Trend in Monthly Fatalities

July 1992 - June 1994

The following table and graph summarize fatalities for the last 12-month period (July - June 1994) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1992	1993	1993/1992
July	325	415	27.7%
August	390	363	-6.9%
September	315	327	3.8%
October	317	331	4.4%
November	314	317	1.0%
December	327	344	5.2%
	1993	1994	1994/1993
January	230	227	-1.3%
February	225	186	-17.3%
March	220	173	-21.4%
April	215	190	-11.6%
May	291	268	-7.9%
June	323	260	-19.5%
12 Month Total	3492	3401	-2.6%

Persons Killed In Reportable Traffic Collisions In Canada By Month Of Occurrence - 1992-93 - 1993-94





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CL 9501 (E)

Publication

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TP 2436

FEUILLET

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T260
-L21

January 1995

Table 1

Results of the October 1994 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1987-1994

% of Car Drivers Wearing Shoulder Belts, Where Available

Prov.	1987 Oct.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.	1993 June	1993 Oct.	1994 June	1994 Oct.
Nfld	64,6	72,4	64,6	84,2	91,6	90,6	93,9	94,8	96,7	97,5	95,7	95,7
P.E.I.	50,0	82,0	72,7	65,2	74,7	78,7	81,8	81,4	83,4	81,5	90,2	90,5
N.S.	68,6	73,4	79,1	83,4	83,9	86,3	85,5	86,3	87,4	86,3	87,0	90,5
N.B.	65,0	67,6	64,4	76,9	81,9	83,2	81,3	81,3	85,6	86,2	88,9	92,1
Que.	85,8	81,5	81,6	93,5	92,4	92,8	91,3	91,8	92,6	92,6	92,1	94,4
Ont.	67,6	70,3	70,8	71,6	79,7	83,2	80,5	84,1	84,0	83,6	88,8	91,0
Man.	64,6	66,0	79,3	73,4	79,4	79,9	81,6	80,2	82,9	83,3	86,1	85,8
Sask.	71,9	81,0	87,7	91,5	91,5	90,6	93,9	93,8	93,7	95,4	92,7	92,7
Alta.	74,3	82,5	44,6	88,1	84,4	83,2	86,3	84,8	86,6	88,3	87,8	88,5
B.C.	80,4	79,8	85,2	88,3	87,0	84,9	91,1	90,6	91,4	91,3	92,7	92,0
Y.T.					24,5*	74,8	58,8	84,0	80,8	78,3	67,6	79,2
N.W.T.					74,4*	75,6	64,7	69,5	59,8	60,2	75,5	77,9
Canada	74,0	75,8	73,9	81,9	85,1	86,0	85,7	87,1	87,8	87,8	90,1	91,6

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory



Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
October 1994

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	95.7	95.1	91.5	95.0
Prince Edward Island	90.5	88.9	75.9	88.5
Nova Scotia	90.5	87.1	75.6	88.8
New Brunswick	92.1	91.4	82.4	91.0
Quebec	94.4	94.0	88.4	94.0
Ontario	91.0	89.4	81.7	90.3
Manitoba	85.8	81.4	66.4	83.9
Saskatchewan	92.7	90.4	83.7	91.1
Alberta	88.5	88.8	76.8	87.0
British Columbia	92.0	93.2	81.9	91.0
Yukon	79.2	74.5	65.6	75.2
N.W.T.	77.9	76.7	72.4	76.4
Canada	91.6	90.4	81.4	90.6

Transport Canada's latest semi-annual survey of seat belt use was undertaken during the week of October 17 to October 23, 1994.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased 3.8 per cent to 91.6 per cent in October 1994, up from 87.8 per cent in October 1993 (see Table 1). This estimate is accurate within \pm 0.9 percent 19 times out of 20 in repeated samples.

Highlights of the results of the survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- A record eight provinces reached seat belt use rates of more than 90 percent, up from four a year ago.
- Newfoundland led the country with 96 per cent of drivers buckling up, followed by Quebec at 94 per cent, Saskatchewan at 93 per cent, New Brunswick and British Columbia were identical at 92, Ontario, Nova Scotia and Prince Edward Island all at 91.
- Other provinces increases included Alberta, at 89 percent, Manitoba, at 86 per cent. Yukon, at 79 per cent, while the North West Territories rate increased to 80 per cent.

In this year's survey, all 10 provinces achieved belt use rates of more than 86 percent, the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As for last year, this year's survey also distinguished passenger vans from light trucks. The survey showed that the use of seat belts by drivers was 90 per cent in passenger vans and 81 per cent in light trucks compared to 87 and 76 per cent respectively last year. Seat belt use by passenger van drivers varied from 75 percent in Yukon to 95 per cent in Newfoundland; use by drivers of light trucks varied from 66 per cent in Yukon and Manitoba to 92 percent in Newfoundland. These two categories of vehicles accounted for 24 per cent of the vehicles included in the survey.

Survey Method

The October 1994 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1983 to 1993 surveys. Since 1991, Transport Canada has undertaken two belt use surveys per year. The first survey is conducted during June and the second survey during October. The June survey collects information on belt use by all occupants of the vehicle, but without such variables as sex and age of occupant, and light use of the vehicle. The October survey collects information on belt use by drivers only, with the usual demographic information on age and sex of driver and light use of the vehicle.

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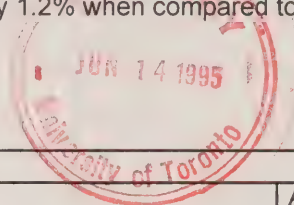
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May 1995

Preliminary Fatality Statistics

During 1994, 3,241 road users died in reportable traffic collisions in Canada, a decrease of 10.1% over the number of traffic deaths recorded during the same period last year, and a decrease of 9.9% compared to the average number of fatalities during the last three years.

During this period, the number of motor vehicle drivers, motor vehicle passengers, pedestrians, and motorcyclists killed in traffic collisions (at 1634, 862, 420 and 155) decreased by 9.4%, 10.1%, 11.2% and 14.8% respectively, while the number of cyclists killed (at 85) increased by 1.2% when compared to fatalities among the same road user classes during the same period in 1993.



1994 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	3	3	3	1	0	2	0	3	1	1	0	14	31	-31.1	-34.0
P.E.I.	3	0	1	0	3	3	0	2	0	3	0	3	18	-10.0	-15.6
N.S.	4	1	3	8	8	6	13	15	11	6	9	7	91	-9.0	-16.8
N.B.	4	2	1	6	6	8	4	15	7	10	7	10	80	-42.0	-38.0
Que.	70	55	40	41	63	73	89	84	83	108	59	59	824	-15.2	-16.6
Ont.	76	65	74	73	79	90	100	113	76	99	65	78	988	-13.0	-10.9
Man.	0	3	5	12	8	10	18	22	6	9	9	17	119	-11.2	-3.8
Sask.	8	6	5	6	9	15	35	20	7	15	11	14	151	-1.3	-2.8
Alta.	31	20	20	21	45	36	42	31	41	29	36	42	394	2.9	0.9
B.C.	46	37	28	28	47	41	52	63	55	60	35	40	532	3.9	4.9
Yukon	0	0	1	0	2	1	1	2	2	1	0	0	10	25.0	-9.1
N.W.T.	0	0	0	0	1	0	0	0	0	2	0	0	3	-39.7	-39.6
Canada	245	192	181	196	271	285	354	370	289	343	231	284	3241	-10.1	-9.9

1994 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for 1994.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	125	70	32	1	0	17	245
February	104	43	39	1	0	6	193
March	93	53	29	1	2	3	181
April	100	45	30	5	10	6	196
May	142	63	32	11	18	4	270
June	152	79	20	11	20	3	285
July	168	100	35	13	28	10	354
August	169	98	37	24	31	11	370
September	141	65	37	11	29	6	289
October	182	95	41	6	14	5	343
November	120	69	37	0	3	2	231
December	138	82	51	1	0	12	284
Total	1634	862	420	85	155	85	3241

Fatality Trends By Road User Class and Province/Territory - 1993 - 1994

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory during 1993 and 1994. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change	1993	1994	% Change
Nfld.	27	12	-55.6%	12	12	0.0%	6	3	-50.0%	0	1	-	0	1	-
P.E.I.	9	11	22.2%	6	5	-16.7%	3	1	-66.7%	0	0	-	2	0	-
N.S.	53	50	-5.7%	31	21	-32.3%	7	10	42.9%	2	2	0.0%	7	7	0.0%
N.B.	66	45	-31.8%	36	24	-33.3%	19	4	-78.9%	1	3	200.0%	10	2	-80.0%
Que.	488	418	-14.3%	225	174	-22.7%	132	118	-10.6%	23	33	43.5%	65	44	-32.3%
Ont.	595	509	-14.5%	296	270	-8.8%	146	120	-17.8%	34	27	-20.6%	31	52	67.7%
Man.	64	58	-9.4%	43	30	-30.2%	17	17	0.0%	5	4	-20.0%	5	7	40.0%
Sask.	82	73	-11.0%	37	43	16.2%	21	16	-23.8%	2	4	100.0%	5	4	-20.0%
Alta.	191	210	9.9%	103	101	-1.9%	52	55	5.8%	6	6	0.0%	21	11	-47.6%
B.C.	222	244	9.9%	167	174	4.2%	70	76	8.6%	10	5	-50.0%	36	26	-27.8%
Yuk.	5	4	-20.0%	1	5	400.0%	0	0	-	1	0	-100.0%	0	1	-
N.W.T.	2	0	-100.0%	2	3	50.0%	0	0	-	0	0	-	0	0	-
Canada	1804	1634	-9.4%	959	862	-10.1%	473	420	-11.2%	84	85	1.2%	182	155	-14.8%

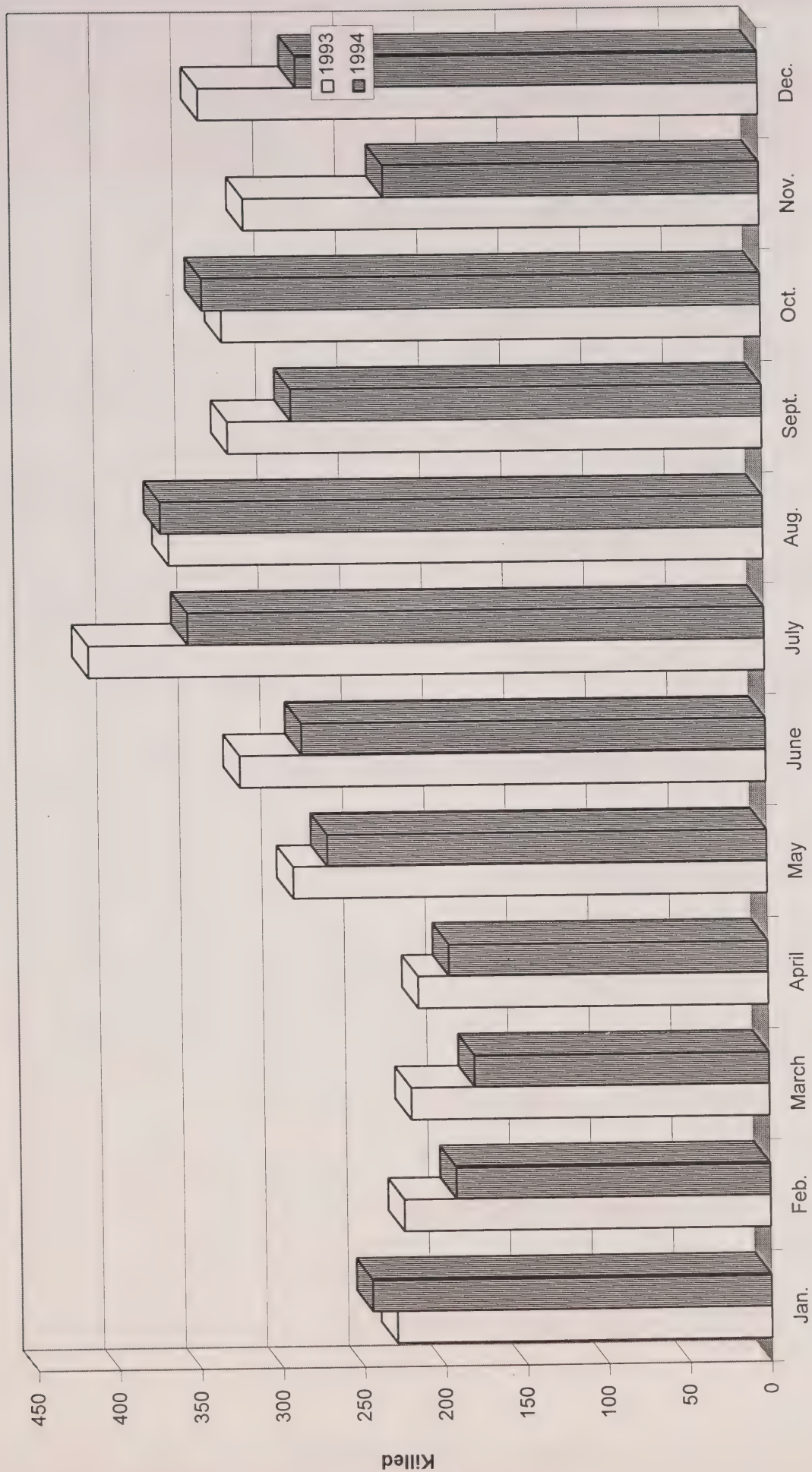
National Trend in Monthly Fatalities

January 1993 - December 1994

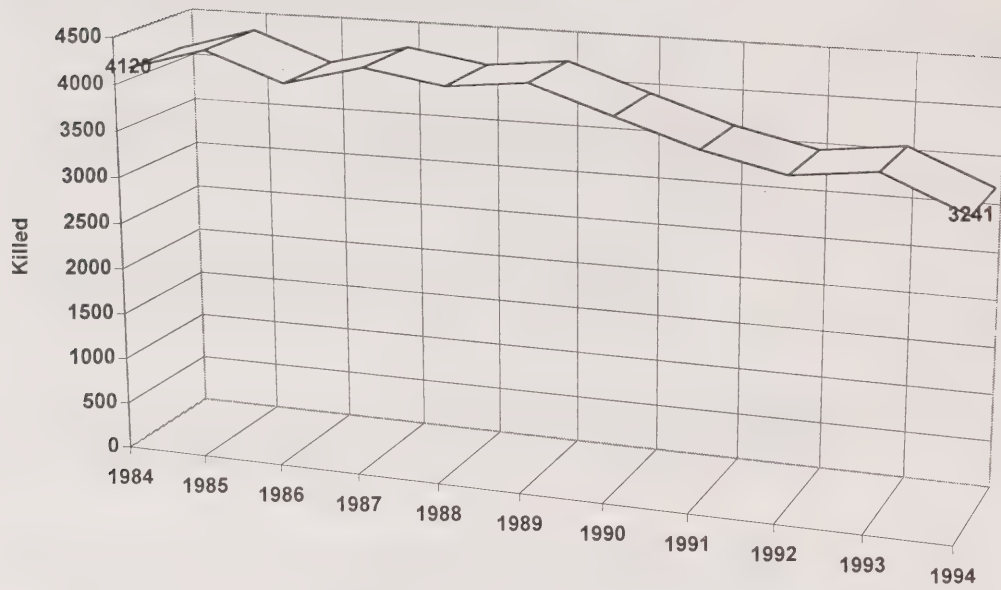
The following table and graph summarize fatalities for the last 12-month period (January 1994 - December 1994) and compare these figures with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1993	1994	1994/1993
January	230	245	6.5%
February	225	193	-14.2%
March	220	181	-17.7%
April	215	196	-8.8%
May	291	270	-7.2%
June	323	285	-11.8%
July	415	354	-14.7%
August	365	370	1.4%
September	328	289	-11.9%
October	331	343	3.6%
November	317	231	-27.1%
December	344	284	-17.4%
12 Month Total	3604	3241	-10.1%

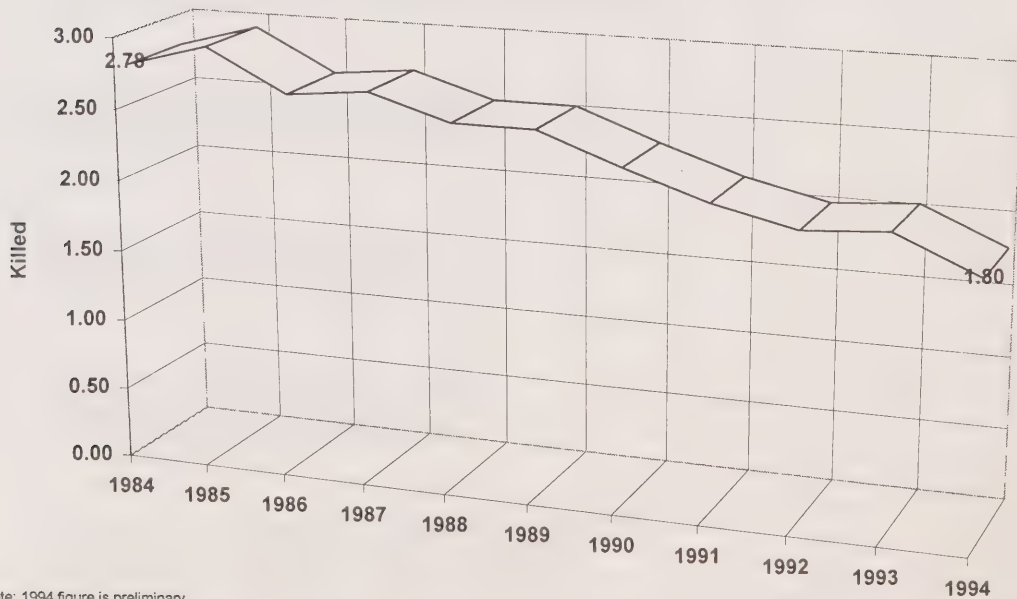
Road Users Killed In Reportable Traffic Collisions - Canada - 1993 - 1994



Road Users Killed In Reportable Traffic Collisions In Canada - 1984 - 1994



Road Users Killed Per 10,000 Motor Vehicles Registered - Canada - 1984 - 1994



Note: 1994 figure is preliminary.



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December 1995



Preliminary Fatality Statistics

During the first six months of 1995, 1,452 road users died in reportable traffic collisions in Canada. This total represents an increase of 5.8% over the number of traffic deaths recorded during the same period last year, but a decrease of 0.8% compared to the average number of fatalities for this period during the last three years.

During this period, the number of motor vehicle drivers and motor vehicle passengers killed in traffic collisions (at 738 and 414) increased by 3.1% and 17.9% respectively, while the number of pedestrians, motorcyclists and cyclists killed (at 173, 47 and 28) decreased by 9.9%, 2.1% and 6.7% respectively when compared to fatalities among the same road user classes during the same period in 1994.

The projected traffic fatality total for Canada during 1995 is 3,444. This total represents an increase of 5.6% over the number of road users killed in 1994, and a 0.4% decrease compared to the average number of traffic fatalities during the previous three years.

1995 Preliminary Fatality Statistics									Percent Change	
	Month						Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
	Jan	Feb	Mar	Apr	May	June				
Nfld.	3	4	2	1	2	1	13	33	-23.5	-22.0
P.E.I.	3	1	0	0	2	1	7	17	-30.0	-4.5
N.S.	3	4	12	10	11	9	49	145	63.3	42.7
N.B.	8	7	5	5	2	8	35	88	29.6	-24.5
Que.	68	57	49	48	79	88	389	919	13.7	-1.1
Ont.	70	66	66	69	63	100	434	994	-4.4	-7.5
Man.	10	11	4	10	4	16	55	149	44.7	20.4
Sask.	10	6	6	6	15	21	64	151	30.6	1.6
Alta.	24	26	21	33	38	21	163	385	-5.8	0.8
B.C.	28	39	41	41	42	49	240	557	5.7	10.1
Yukon	0	0	0	0	0	2	2	4	-50.0	-62.5
N.W.T.	0	0	0	1	0	0	1	2	0.0	-70.0
Canada	227	221	206	224	258	316	1,452	3,444	5.8	-0.8

1995 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for the first six months of 1995.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	107	68	35	1	0	17	228
February	116	68	23	3	0	11	221
March	105	54	38	2	2	5	206
April	117	66	23	1	12	5	224
May	135	69	24	9	15	6	258
June	158	89	30	12	18	8	315
Total	738	414	173	28	47	52	1452

Fatality Trends By Road User Class and Province/Territory - 1994 - 1995

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for the first six months of 1994 and 1995. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change
1.	3	4	33.3%	4	5	25.0%	1	4	300.0%	1	0	-	1	0	-100.0%
2.	6	4	-33.3%	1	1	0.0%	0	0	-	0	1	-	0	1	-
3.	16	29	81.3%	7	12	71.4%	4	6	50.0%	0	0	-	1	2	100.0%
4.	16	19	18.8%	7	10	42.9%	2	3	50.0%	1	1	0.0%	1	2	100.0%
5.	182	181	-0.5%	72	98	36.1%	48	54	12.5%	12	11	-8.3%	6	17	183.3%
6.	256	236	-7.8%	114	122	7.0%	57	53	-7.0%	7	7	0.0%	18	8	-55.6%
7.	17	23	35.3%	8	17	112.5%	16	9	-43.8%	3	1	-66.7%	3	1	-66.7%
8.	28	29	3.6%	12	18	50.0%	5	5	0.0%	0	2	-	1	3	200.0%
9.	92	88	-4.3%	45	51	13.3%	24	15	-37.5%	3	2	-33.3%	6	6	0.0%
10.	98	123	25.5%	78	80	2.6%	35	24	-31.4%	3	3	0.0%	11	7	-36.4%
11.	2	1	-50.0%	2	0	-100.0%	0	0	-	0	0	-	0	0	-
12.	0	1	-	1	0	-100.0%	0	0	-	0	0	-	0	0	-
Canada	716	738	3.1%	351	414	17.9%	192	173	-9.9%	30	28	-6.7%	48	47	-2.1%

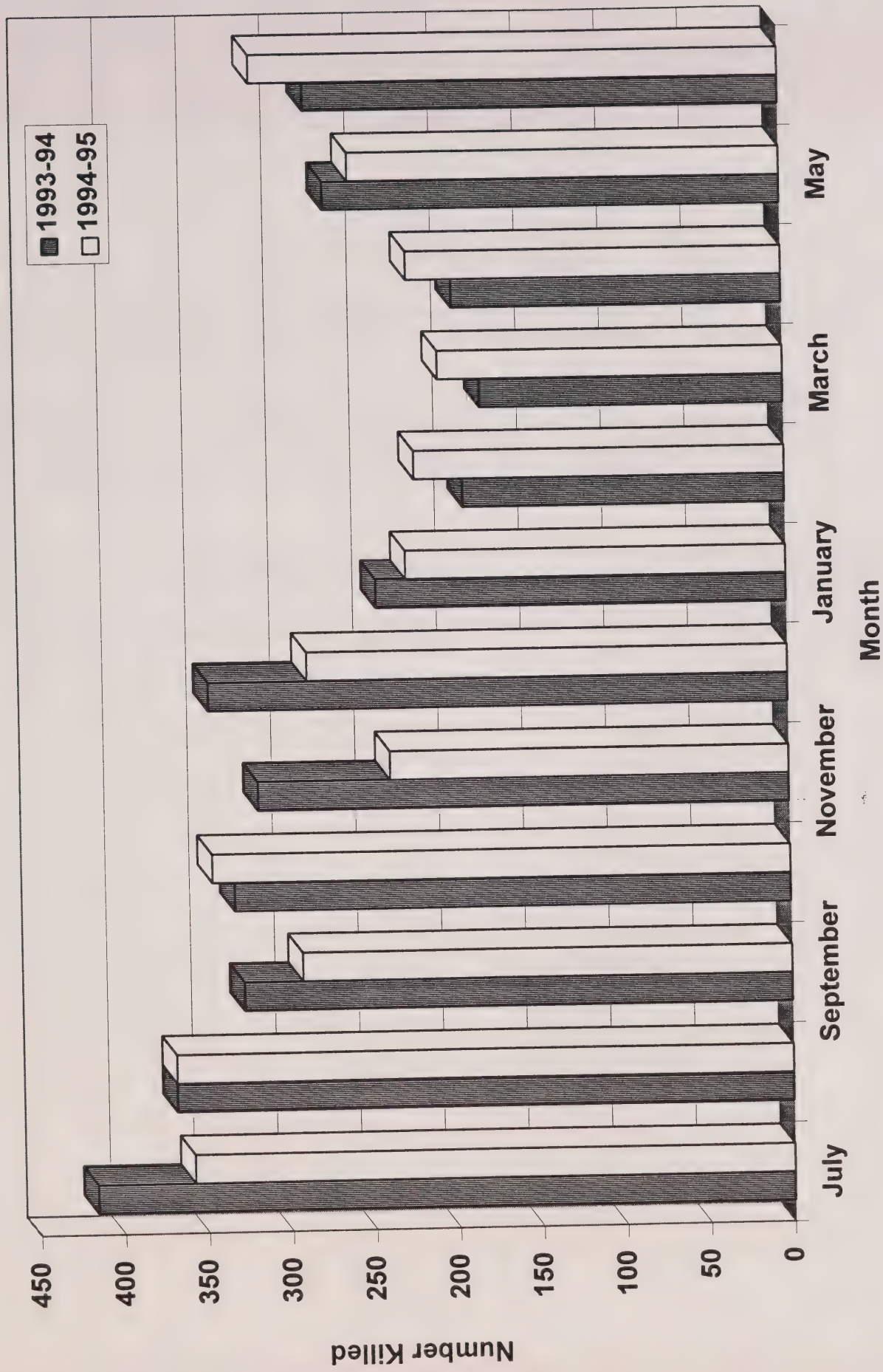
National Trend in Monthly Fatalities

July 1993 - June 1995

The following table and graph summarize fatalities for the last 12-month period (July - June 1995) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1993	1994	1994/1993
July	416	358	-13.9%
August	368	368	0.0%
September	327	292	-10.7%
October	332	345	3.9%
November	317	238	-24.9%
December	346	287	-17.1%
	1994	1995	1995/1994
January	245	227	-7.3%
February	192	221	15.1%
March	181	206	13.8%
April	197	224	13.7%
May	273	258	-5.5%
June	284	316	11.3%
12 Month Total	3478	3340	-4.0%

**Persons Killed In Reportable Traffic Collisions In Canada By Month Of Occurrence
1993-94 - 1994-95**





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June 1996

Preliminary Fatality Statistics

During 1995, 3,313 road users died in reportable traffic collisions in Canada, an increase of 1.6% over the number of traffic deaths recorded during the same period last year, and a decrease of 4.2% compared to the average number of fatalities during the last three years.

During this period, the number of fatally injured motor vehicle drivers and motor vehicle passengers (at 1,674 and 925) increased by 1.7% and 7.6% respectively, while the number of pedestrians, motorcyclists and cyclists killed in traffic collisions (at 409, 153 and 63) decreased by 4.2%, 6.1%, and 25.9% respectively when compared to fatalities among the same road user classes during the same period in 1994.

1995 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	3	4	2	1	2	1	2	2	1	1	3	3	25	-30.6	-40.5
P.E.I.	3	1	0	0	2	1	0	4	0	4	0	1	16	-15.8	-7.7
N.S.	3	4	12	10	11	9	15	6	14	9	3	11	107	17.6	5.6
N.B.	8	7	5	5	2	8	24	17	11	7	6	12	112	41.8	-3.4
Que.	73	57	52	50	81	97	88	88	79	69	85	63	882	7.0	-5.1
Ont.	71	66	68	71	68	106	117	101	86	77	69	86	986	-1.3	-8.3
Man.	10	11	4	14	4	16	15	14	12	8	8	12	128	7.6	3.5
Sask.	10	6	6	6	15	22	18	22	13	14	8	16	156	3.3	4.7
Alta.	27	26	21	32	38	24	45	45	41	52	28	24	403	2.0	5.5
B.C.	28	39	41	41	42	51	52	44	41	37	29	34	479	-10.3	-5.4
Yukon	0	0	0	0	0	2	2	3	0	0	0	7	14	40.0	27.3
N.W.T.	0	0	0	2	0	0	1	0	1	0	1	0	5	66.7	-11.8
Canada	236	221	211	232	265	337	379	346	299	278	240	269	3,313	1.6	-4.2

1995 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for 1995.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	109	71	36	1	0	19	236
February	116	68	23	3	0	11	221
March	106	55	41	2	3	4	211
April	120	65	27	1	11	8	232
May	139	69	27	9	15	6	265
June	168	93	32	13	25	6	337
July	186	117	28	6	38	4	379
August	165	91	51	15	22	2	346
September	146	84	37	4	24	4	299
October	160	61	30	5	14	8	278
November	129	71	32	3	1	4	240
December	130	80	45	1	0	13	269
Total	1,674	925	409	63	153	89	3,313

Fatality Trends By Road User Class and Province/Territory - 1994 - 1995

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory during 1994 and 1995. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change	1994	1995	% Change
Nfld.	14	12	-14.3%	13	6	-53.8%	4	7	75.0%	1	0	-100.0%	2	0	-100.0%
P.E.I.	12	11	-8.3%	6	1	-83.3%	0	0	-	0	1	-	0	1	-
N.S.	52	61	17.3%	20	25	25.0%	10	16	60.0%	2	0	-100.0%	7	5	-28.6%
N.B.	46	67	45.7%	22	30	36.4%	4	10	150.0%	3	2	-33.3%	2	3	50.0%
Que.	418	417	-0.2%	174	213	22.4%	118	130	10.2%	33	25	-24.2%	49	60	22.4%
Ont.	508	528	3.9%	274	267	-2.6%	127	123	-3.1%	27	19	-29.6%	54	38	-29.6%
Man.	61	60	-1.6%	30	40	33.3%	17	14	-17.6%	4	2	-50.0%	7	5	-28.6%
Sask.	73	72	-1.4%	43	48	11.6%	16	15	-6.3%	4	4	0.0%	4	5	25.0%
Alta.	210	205	-2.4%	102	127	24.5%	55	39	-29.1%	6	4	-33.3%	11	14	27.3%
B.C.	247	235	-4.9%	169	158	-6.5%	76	53	-30.3%	5	6	20.0%	26	22	-15.4%
Yuk.	4	4	0.0%	5	9	80.0%	0	0	-	0	0	-	1	0	-100.0%
N.W.T.	1	2	100.0%	2	1	-50.0%	0	2	-	0	0	-	0	0	-
Canada	1,646	1,674	1.7%	860	925	7.6%	427	409	-4.2%	85	63	-25.9%	163	153	-6.1%

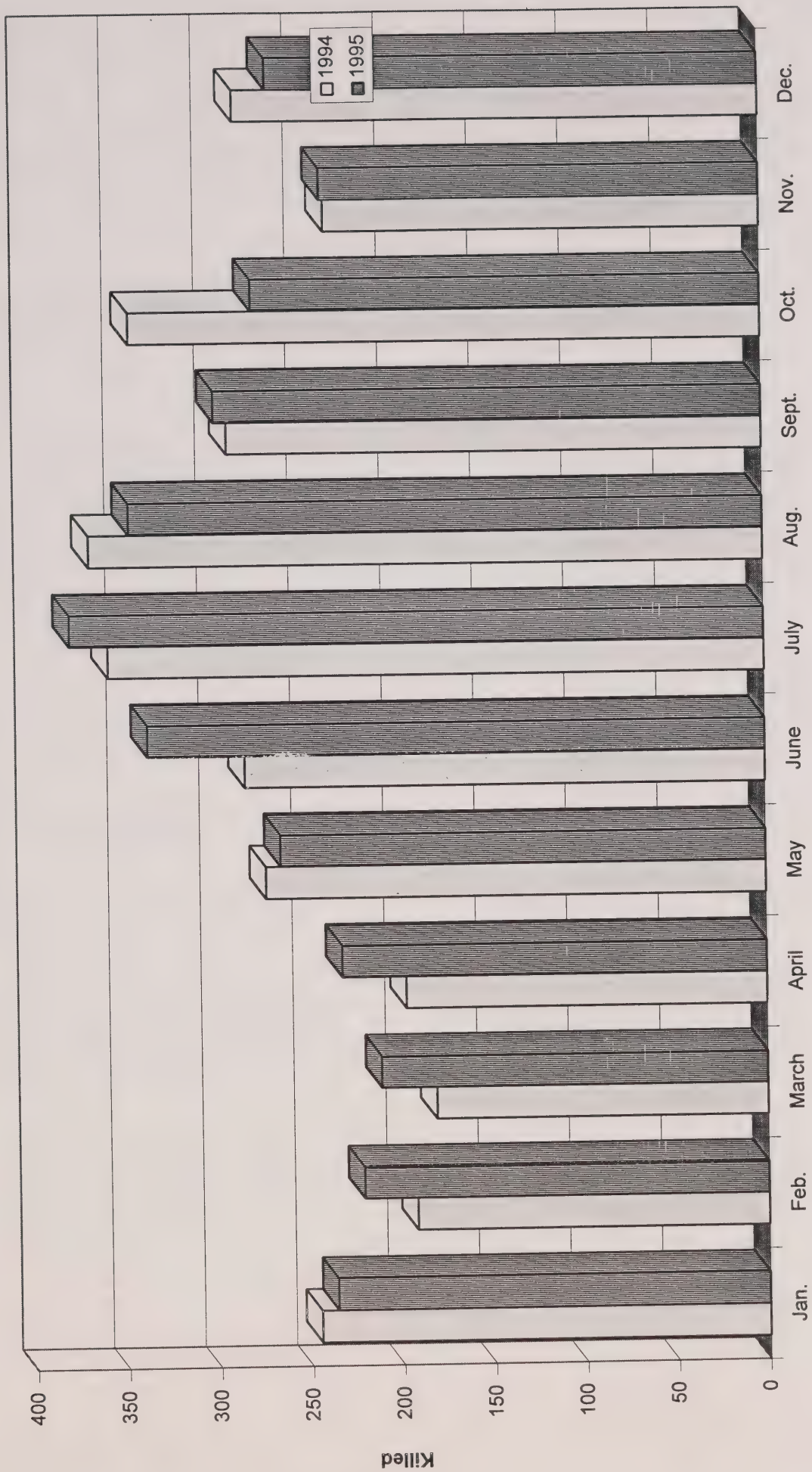
National Trend in Monthly Fatalities

January 1994 - December 1995

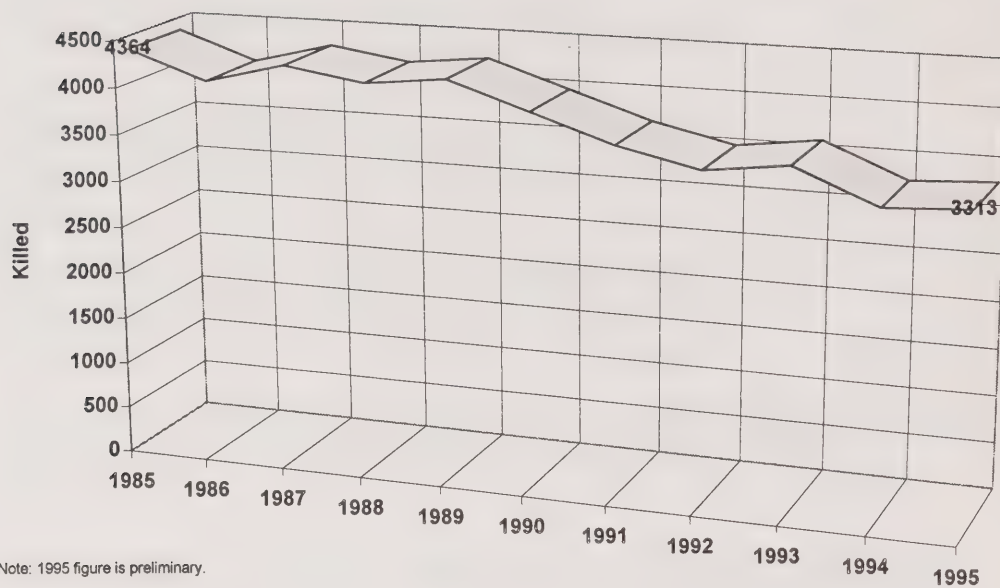
The following table and graph summarize fatalities for the last 12-month period (January 1995 - December 1995) and compare these figures with statistics for the corresponding period of the previous year.

	Fatalities	Fatalities	% Change
Month	1994	1995	1995/1994
January	245	236	-3.7%
February	192	221	15.1%
March	181	211	16.6%
April	197	232	17.8%
May	273	265	-2.9%
June	284	337	18.7%
July	358	379	5.9%
August	368	346	-6.0%
September	292	299	2.4%
October	345	278	-19.4%
November	238	240	0.8%
December	287	269	-6.3%
12 Month Total	3,260	3,313	1.6%

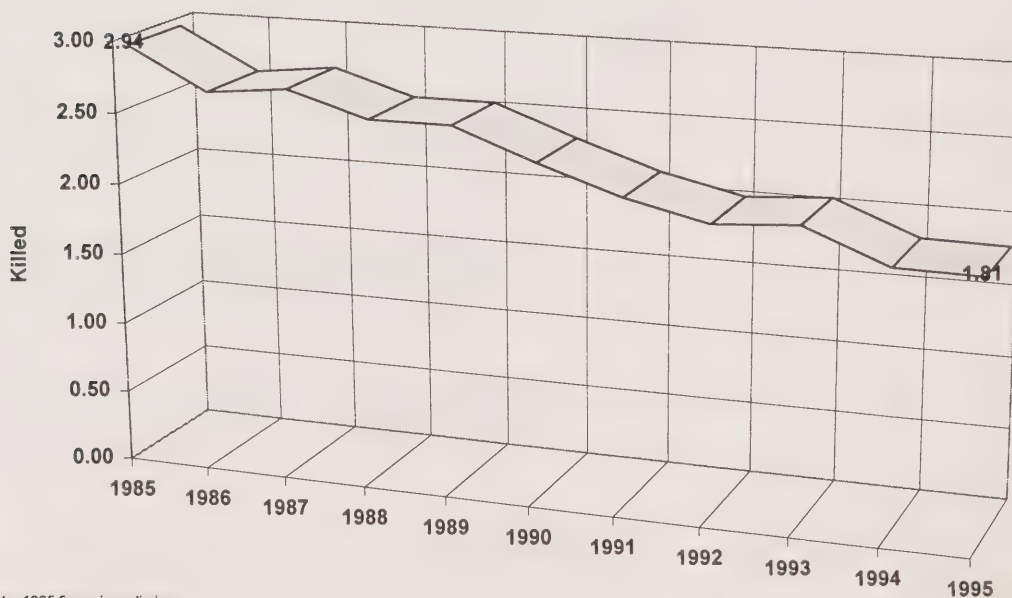
Road Users Killed In Reportable Traffic Collisions - Canada - 1994 - 1995



Road Users Killed In Reportable Traffic Collisions In Canada - 1985 - 1995



Road Users Killed Per 10,000 Motor Vehicles Registered - Canada - 1985 - 1995





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INFORMATION 1-800-333-0371

FEUILLET

July 1996

ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS: 1994 AND THE PREVIOUS SEVEN YEARS

Background:

This leaflet provides information on the blood alcohol concentration (BAC) of drivers fatally injured in motor vehicle accidents in Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database¹, which consists of data collected from reports prepared by provincial coroners, medical examiners or investigating police officers. These data are supplied by provincial and territorial agencies. There are no data regarding whether the drivers were at fault in the collision.

Information has been compiled since 1973 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and Prince Edward Island). In 1985, Nova Scotia was added to the database followed by Newfoundland in 1986. In 1987, similar data from Quebec and the two territories became available, making the fatality database representative of all ten provinces and two territories (twelve jurisdictions).

In reporting the data in the figures to follow, a number of conventions have been adopted. The reader should be aware that:

1. The numbers presented in Figures 2 - 8 are based solely on the number of fatal drivers that were tested for blood alcohol concentration.
2. The 1994 and comparative 1993 results include data from all provinces and territories in Canada and are based on victims dying within twelve months of the accident. The eight-year results (1987-1994) are based on data from all provinces and territories but include victims whose death occurred within six hours after the accident, a convention established in previous years.
3. The data include only fatally injured drivers of the principal types of motorized vehicles on public roadways, i.e., automobiles, trucks/vans, motorcycles/mopeds, and tractor-trailers. Excluded are operators of bicycles and other non-highway vehicles, pedestrians and passengers.

¹. The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.



4. BACs are reported in milligrams of alcohol per 100 milliliters of blood, (e.g., .08 = 80 mg %). The percentage of drivers who had been drinking prior to the accident (BAC = 1 mg % or more) and the percentage legally impaired under the Criminal Code of Canada (BAC exceeding 80 mg %) are shown separately in the following figures. For clarity, Figures 6 to 8 show only the percentages of those legally impaired.

1994 Characteristics:

In 1994, 85.9% (1602 of 1866) of fatally injured drivers were tested for level of alcohol in the blood. This rate compares to the 83% tested in 1993. The rates of testing ranged from 73.3% for Newfoundland to 100% for Prince Edward Island and the Yukon (Figure 1). Rates of testing were over 90% for 4 jurisdictions and over 80% for 8 jurisdictions. Percentages based on lower rates of testing should be interpreted with caution because there is a possibility of selection bias, i.e., drivers suspected of impairment may be more likely to have been tested.

Figures 2 to 4 present data from all of the twelve jurisdictions for 1994. Figure 2 shows the percentage of fatally injured drivers who had been drinking and the percentage legally impaired for each jurisdiction. The percentages for the smaller jurisdictions are less reliable (i.e., more subject to chance variation) than those for the larger ones.

Among tested drivers in 1994, 43.9% had been drinking and 36.0% were legally impaired. Both of these rates decreased by 1 or 2% compared to those determined from the 1993 data. Of the 1602 drivers tested, 80% were male and 20% were female. Among males, 49.1% had been drinking compared to 23.0% of the females. The corresponding rates of illegal impairment were 40.7% for males and 17.0% for females (figure not provided). Figure 3 shows that among different age groups, the highest percentage of legal impairment occurred among 21-35 year olds (48.8%) and declined dramatically after age forty-five. Examination of BAC by vehicle type (Figure 4) reveals that truck/van (excluding tractor-trailer) drivers had the highest rate of legal impairment (41.4%), followed by motorcycle drivers (35.9%) and automobile drivers (35.1%).

Trends During the Past Eight Years:

Figures 5 to 8 present data for the eight-year period, 1987 to 1994. To maintain consistency from year to year, only eight years of data have been aggregated, beginning with 1987 which is the first year that includes all provinces and territories. The fatalities include drivers age 10 and older and only victims whose death occurred within six hours after the accident.

Figure 5 shows that after four years of fairly steady decline followed by two consecutive increases, 1993 and 1994 again showed a decrease. In 1994 the percentage of fatally injured drivers who had been drinking (44%) or who were legally impaired (36%) decreased respectively by 1% and 2% from the previous year.

Figure 6 shows that over the eight-year period, fatally injured female drivers were consistently less likely to be legally impaired by alcohol than were males. In 1994, alcohol impairment among males (41%) and females (16%) decreased from 1993.

Figure 7 shows that the overall downward trend was not exhibited equally by all age groups. Fatally injured drivers in the over 45 year old category showed the largest decrease over eight years. The 26-35 year old category generally maintained a higher percentage of impaired drivers than the 21-25 group, but in 1994 both categories were approximately equal.

Figure 8 demonstrates that over the eight-year period, fatally injured drivers of trucks/vans (excluding tractor-trailers) had the highest percentage of illegal BACs, followed by motorcycle/moped drivers and automobile drivers. Rates of impairment for motorcycle/moped drivers decreased in 1994 following a brief increase in 1993. The rates for truck/van operators decreased by about 7% in 1994. Automobile drivers exhibited an overall decline over eight years although from 1993 to 1994 there was only a slight decline. Tractor-trailers are not included in Figure 8 because the small number of fatalities in this group results in unreliable year-to-year fluctuations.

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Figure 1
Distribution of Fatally Injured Drivers That Were Tested
by Jurisdiction : 1994

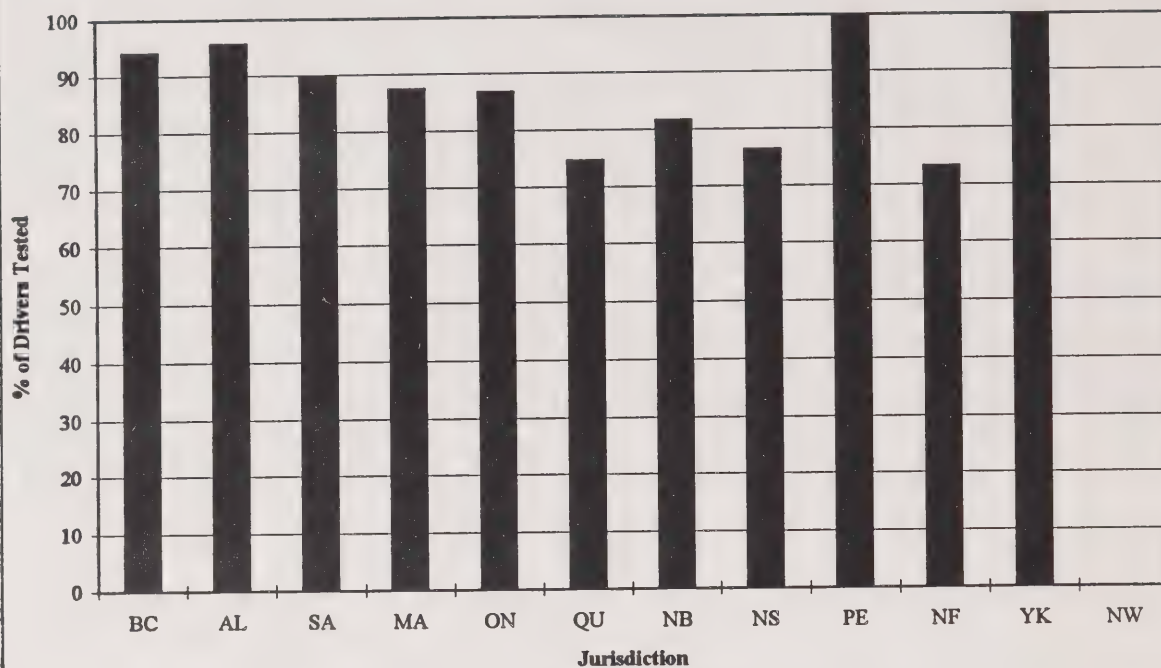


Figure 2
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers By Jurisdiction : 1994

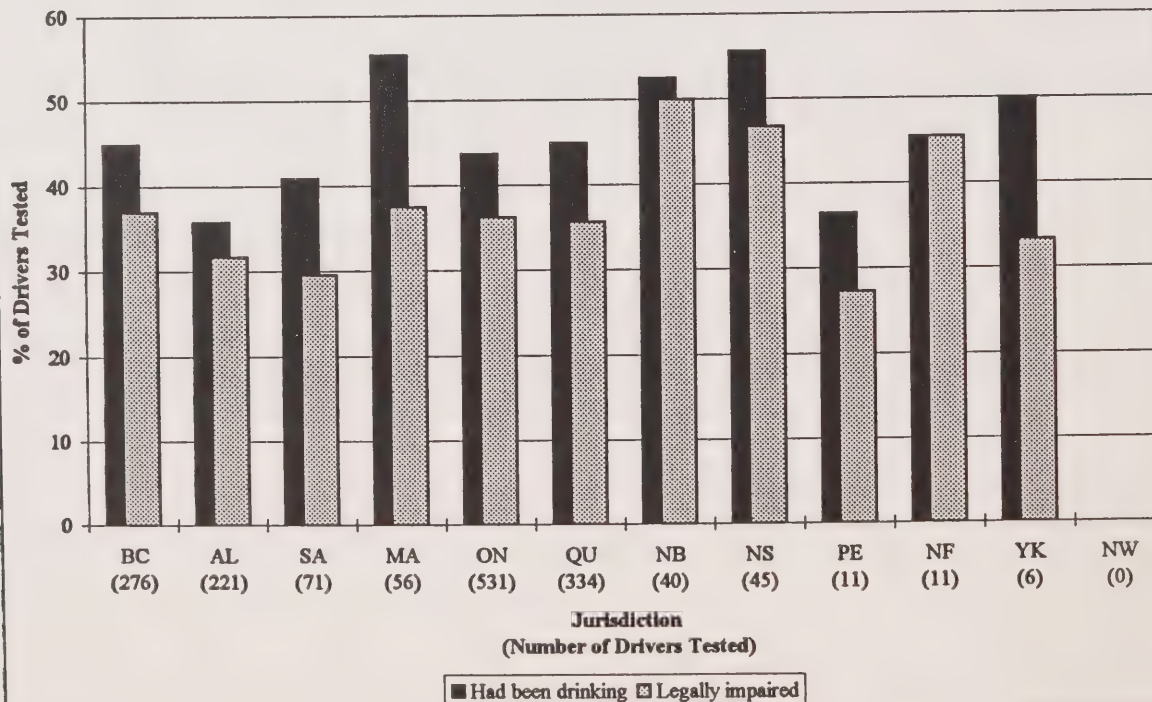


Figure 3
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Age Group : 1994 (Canada)

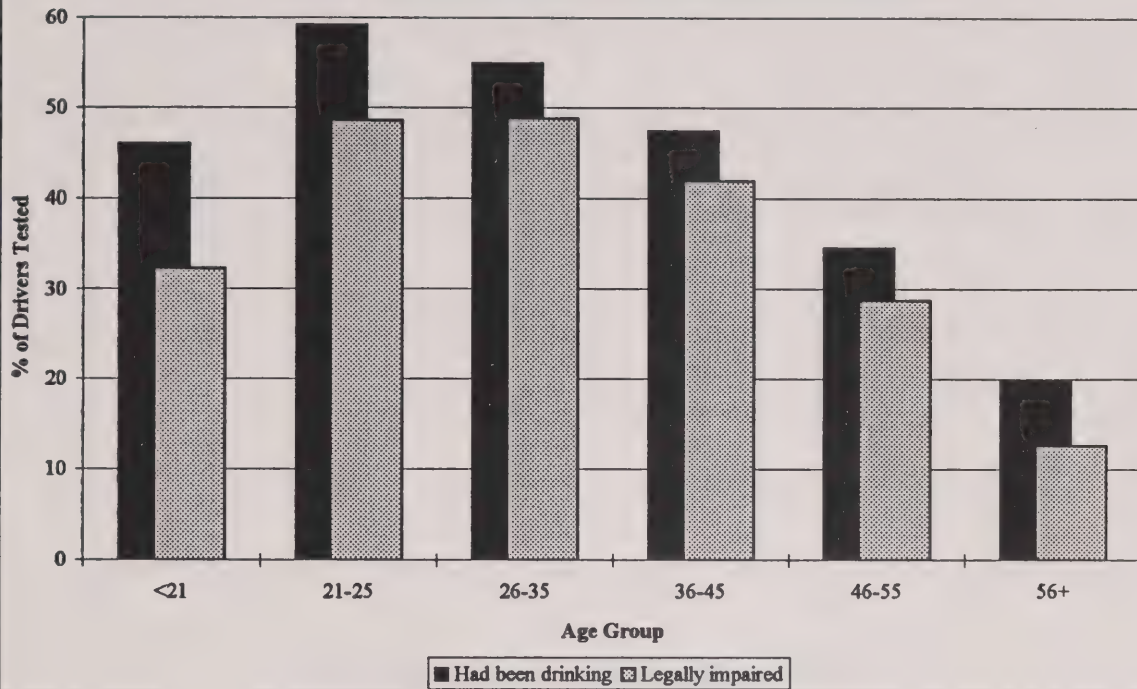


Figure 4
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers by Vehicle Type : 1994 (Canada)

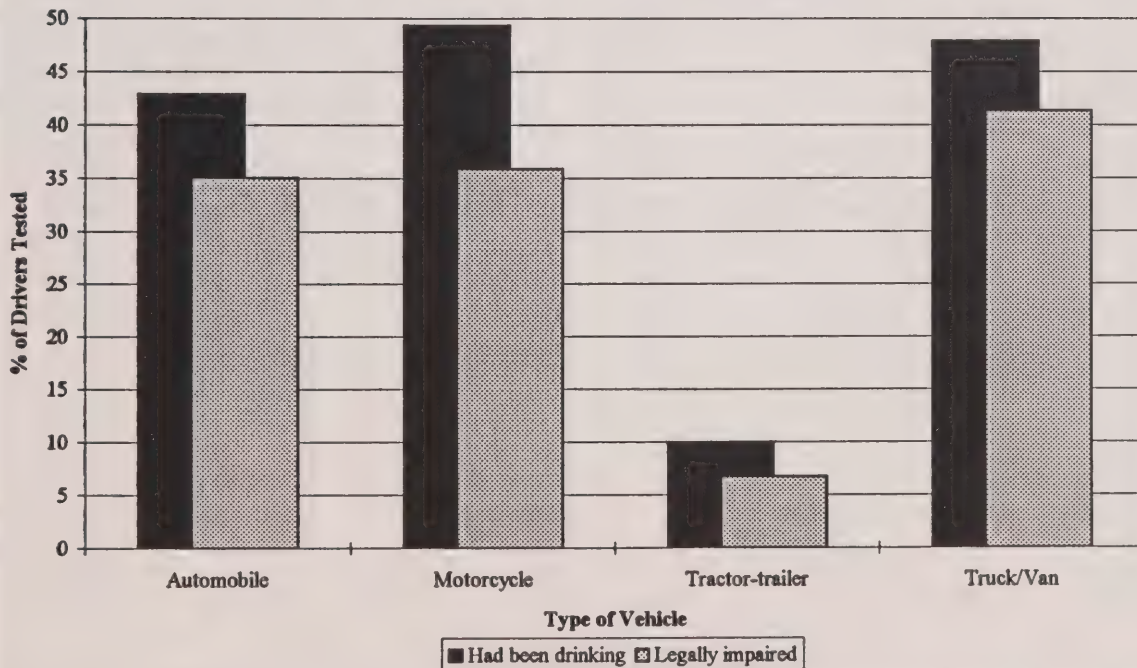


Figure 5
Distribution of Blood Alcohol Concentration Among
Fatally Injured Drivers (Canada)

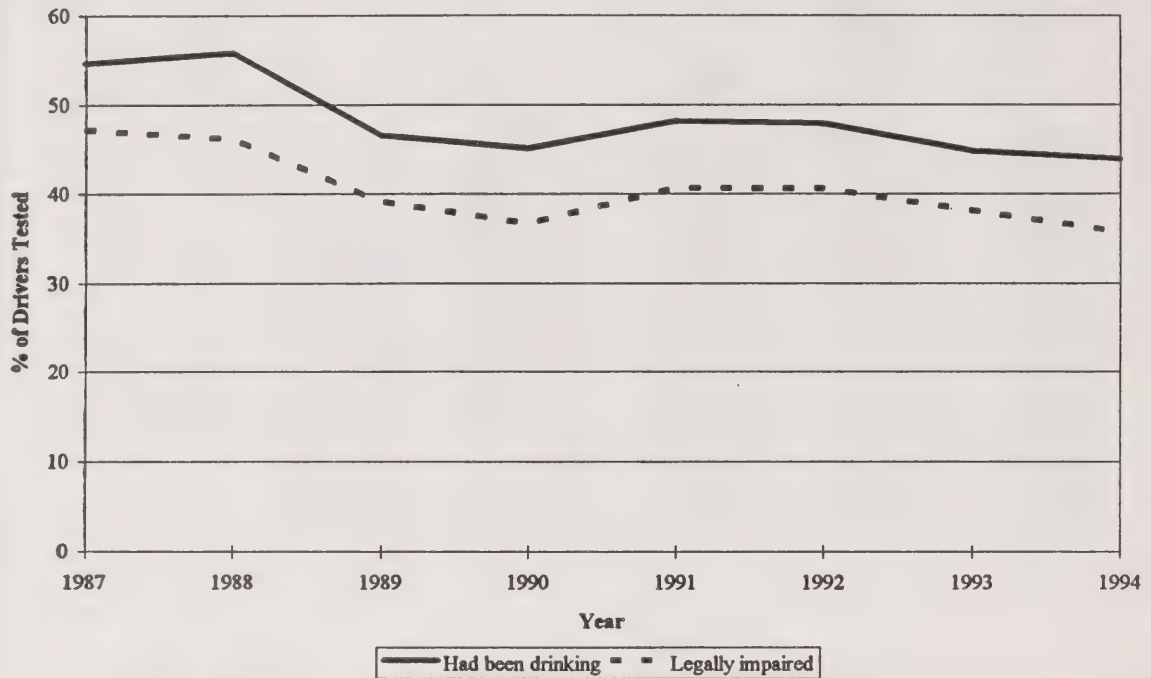


Figure 6
Distribution of Fatally Injured Drivers with Illegal Blood
Alcohol Concentration by Sex (Canada)

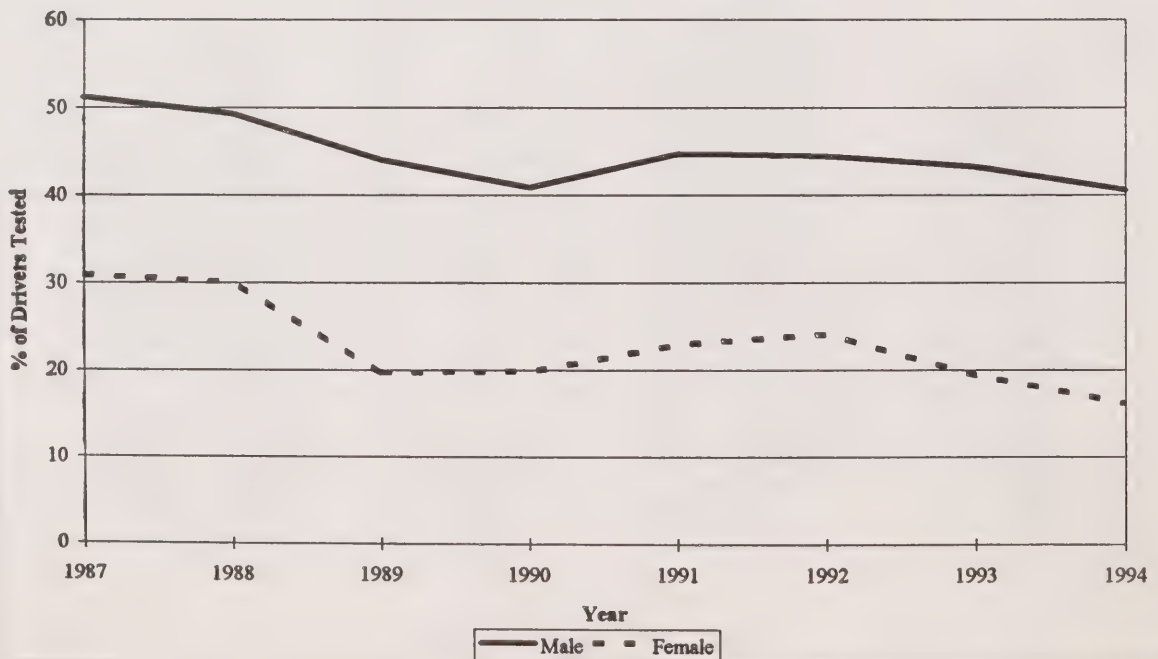


Figure 7
Distribution of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Age Group (Canada)

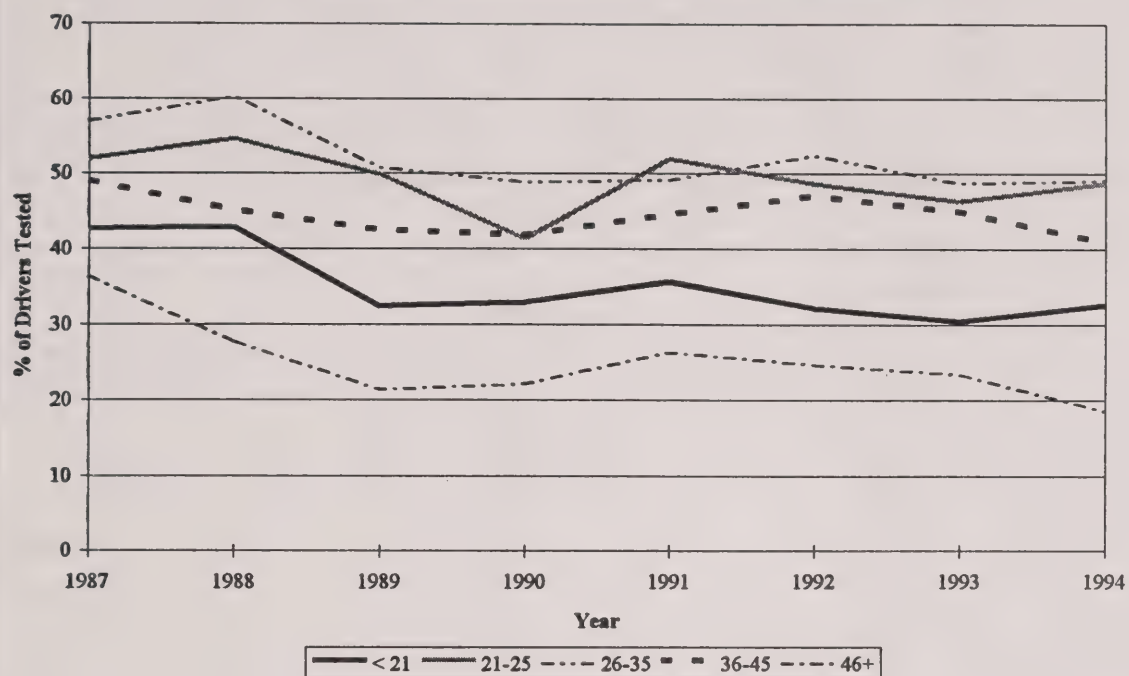
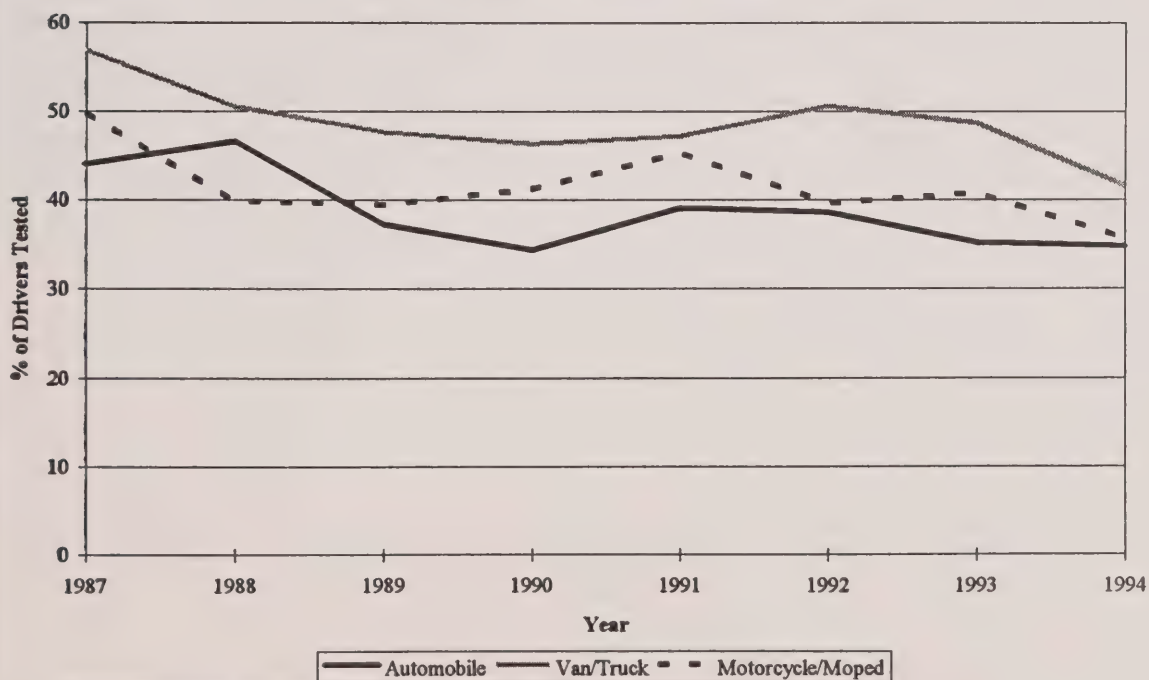


Figure 8
Distribution of Fatally Injured Drivers with Illegal Blood Alcohol Concentration by Vehicle Type (Canada)



APPENDIX

Corresponding Data for Figures 1-8
(e.g., Table 1 corresponds to data shown graphically in Figure 1.)

Table 1

Distribution of Fatally Injured Drivers and Percentage of Fatally Injured Drivers Tested by Jurisdiction (1994)

Jurisdiction	Number of Fatally Injured Drivers	Percentage of Fatally Injured Drivers Tested
British Columbia	293	94.2
Alberta	231	95.7
Saskatchewan	79	89.9
Manitoba	64	87.5
Ontario	612	86.8
Quebec	447	74.7
New Brunswick	49	81.6
Nova Scotia	59	76.3
Prince Edward Island	11	100.0
Newfoundland	15	73.3
Yukon	6	100.0
Northwest Territories	0	NA
TOTAL	1866	85.9

Table 2
Distribution of BAC among Fatally Injured Drivers by Jurisdiction:
1994 (death within 12 months)

Jurisdiction	Number of Drivers Tested	Percent of Drivers Tested	
		≥1 mg %	>80 mg %
British Columbia	276	44.9	37.0
Alberta	221	35.8	31.7
Saskatchewan	71	40.9	29.6
Manitoba	56	55.4	37.5
Ontario	531	43.7	36.2
Quebec	334	44.9	35.6
New Brunswick	40	52.5	50.0
Nova Scotia	45	55.6	46.7
Prince Edward Island	11	36.4	27.3
Newfoundland	11	45.5	45.5
Yukon	6	50.0	33.3
Northwest Territories	0	NA	NA
TOTAL	1602	43.9	36.0

Table 3

**Distribution of BAC among Fatally Injured Drivers by Age:
1993 (Canada; death within 12 months)**

Age	Number of Drivers Tested	Percent of Drivers Tested	
		≥1 mg %	>80 mg %
Under 21	223	38.1	30.0
21-25	243	55.2	47.7
26-35	415	54.5	48.7
36-45	309	49.2	44.7
46-55	208	34.6	27.4
56+	278	28.8	21.2

Table 4

**Distribution of BAC among Fatally Injured Drivers by Vehicle Type:
1993 (Canada; death within 12 months)**

Vehicle Type	Number of Drivers Tested	Percent of Drivers Tested	
		≥1 mg %	>80 mg %
Automobile	1089	42.0	35.3
Truck/Van	379	54.4	48.8
Tractor-trailer	41	12.2	7.32
Moped/Motorcycle	166	49.7	41.1
Buses	1	0.0	0.0

Table 5

**Distribution of BAC among Fatally Injured Drivers:
1987-1994 (all jurisdictions; death within 6 hours)**

Year	≥1 mg %	>80 mg %
1987	54.6	47.2
1988	55.8	46.2
1989	46.6	39.1
1990	45.1	36.7
1991	48.2	40.6
1992	47.9	40.6
1993	44.8	38.1
1994	43.9	35.7

Table 6

**Distribution of Fatally Injured Drivers with Illegal BAC by Sex:
1987-1994 (all jurisdictions; death within 6 hours)**

Sex	1987	1988	1989	1990	1991	1992	1993	1994
Male	51.2	49.3	44.0	40.8	44.7	44.4	43.2	40.6
Female	30.8	30.0	19.7	19.8	22.9	24.1	19.4	16.2

Table 7

**Distribution of Fatally Injured Drivers with Illegal BAC by Age:
1987-1994 (all jurisdictions; death within 6 hours)**

Age	1987	1988	1989	1990	1991	1992	1993	1994
Under 21	42.6	42.9	32.4	32.9	35.6	32.2	30.4	32.6
21-25	51.9	54.6	49.8	41.3	51.9	48.6	46.3	48.7
26-35	56.9	60.2	50.7	48.8	49.1	52.4	48.7	49.0
36-45	49.0	45.1	42.5	41.8	44.6	47.0	44.9	40.9
46+	36.4	27.7	21.4	22.1	26.3	24.7	23.4	18.6

Table 8

**Distribution of Fatally Injured Drivers with Illegal BAC by Vehicle Type:
1987-1994 (all jurisdictions; death within 6 hours)**

Vehicle Type	1987	1988	1989	1990	1991	1992	1993	1994
Automobile	44.1	46.6	37.3	34.4	39.1	38.6	35.2	34.8
Van/Truck	56.9	50.5	47.7	46.3	47.2	50.6	48.7	41.6
Moped/Motorcycle	49.8	39.9	39.5	41.3	45.3	39.7	40.8	35.7



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LEAFLET

INFORMATION 1-800-333-0371

FEUILLET

September 1996

Table 1

Results of June 1996 Survey of Seat Belt Use in Canada

Estimates of Shoulder Seat Belt Use From Annual Surveys 1988-1996

% of Car Drivers Wearing Shoulder Belts, Where Available

Prov.	1988 Oct.	1989 Oct.	1990 Oct.	1991 June	1991 Oct.	1992 June	1992 Oct.	1993 June	1993 Oct.	1994 June	1994 Oct.	1996 June
fld.	72.4	64.6	84.2	91.6	90.6	93.9	94.8	96.7	97.5	95.7	95.7	94.3
P.E.I.	82.0	72.7	65.2	74.7	78.7	81.8	81.4	83.4	81.5	90.2	90.5	91.8
N.S.	73.4	79.1	83.4	83.9	86.3	85.5	86.3	87.4	86.3	87.0	90.5	91.2
N.B.	67.6	64.4	76.9	81.9	83.2	81.3	81.3	85.6	86.2	88.9	92.1	89.5
Que.	81.5	81.6	93.5	92.4	92.8	91.3	91.8	92.6	92.6	92.1	94.4	93.2
Ont.	70.3	70.8	71.6	79.7	83.2	80.5	84.1	84.0	83.6	88.8	91.0	92.3
Man.	66.0	79.3	73.4	79.4	79.9	81.6	80.2	82.9	83.3	86.1	85.8	85.0
Sask.	81.0	87.7	91.5	91.5	90.6	93.9	93.8	93.7	95.4	92.7	92.7	94.0
Alta.	82.5	44.6	88.1	84.4	83.2	86.3	84.8	86.6	88.3	87.8	88.5	89.8
B.C.	79.8	85.2	88.3	87.0	84.9	91.1	90.6	91.4	91.3	92.7	92.0	92.6
Y.T.				24.5*	74.8	58.8	84.0	80.8	78.3	67.6	79.2	87.5
N.W.T.				74.4*	75.6	64.7	69.5	59.8	60.2	75.5	77.9	57.8
Canada	75.8	73.9	81.9	85.1	86.0	85.9	87.1	87.8	87.8	90.1	91.6	91.9

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Canada



Table 2

Estimates of Shoulder Seat Belt Use by Type of Vehicle -
June 1996

Province	Passenger Cars	Passenger Vans	Light Trucks	All Vehicles
Newfoundland	94.3	94.6	91.8	93.9
Prince Edward Island	91.8	89.6	78.0	90.2
Nova Scotia	91.2	88.7	81.7	90.2
New Brunswick	89.5	87.4	80.2	87.9
Quebec	93.2	90.1	81.1	92.3
Ontario	92.3	92.1	86.7	91.8
Manitoba	85.0	85.2	66.6	83.7
Saskatchewan	94.0	90.7	83.0	91.8
Alberta	89.8	88.3	74.0	87.5
British Columbia	92.6	90.4	82.2	91.3
Yukon	87.5	79.8	76.9	82.1
N.W.T.	57.5	65.3	52.1	58.7
Canada	91.9	90.6	82.5	90.8

Transport Canada's latest survey of seat belt use took place between June 22 to June 28, 1996.

Results

For Canada as a whole, the estimated proportion of drivers of cars using the available shoulder belts increased by 0.3 per cent to 91.9 per cent in June 1996, up from 91.6 per cent in October 1994 (see Table 1). This estimate is accurate within ± 0.8 per cent 19 times out of 20 in repeated samples.

Other highlights of the 1996 survey of passenger vehicle drivers for individual provinces and territories were as follows (in rounded percentages):

- A record nine provinces reached seat belt use of more than 90 per cent, up one province from the results of 1994.
- Newfoundland and Saskatchewan led the country with identical rates of 94 per cent of those surveyed buckling up, followed by Quebec and British Columbia at 93 per cent, Ontario and Prince Edward Island were both at 92 per cent.
- Seat belt wearing rates for other provinces were Nova Scotia, at 91 per cent, Alberta and New Brunswick, at 90 per cent, Manitoba, at 85 per cent, Yukon at 88 per cent, while the North West Territories rate came in at 58 per cent.

In this year's survey, all 10 provinces achieved belt use rates of more than 85 per cent. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

LTV

Table 2 presents the survey results of shoulder belt use by type of vehicle. As done in previous surveys, this year's survey distinguished passenger vans from light trucks. The results showed that the use of seat belts by drivers was 91 per cent in passenger vans and 81 per cent in light trucks compared to 90 and 81 per cent respectively observed in the 1994 survey year. Seat belt use by passenger van drivers varied from 65 per cent in N.W.T. to 95 per cent in Newfoundland; use by drivers of light trucks varied from 52 per cent in N.W.T. to 92 per cent in Newfoundland. These two categories of vehicles accounted for 24.7 per cent of the vehicles included in the survey.

Survey Method

The June 1996 survey was undertaken at 240 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1988 to 1994 surveys. Information was collected on belt use by all occupants of the vehicle and daytime light use of the vehicle. While a survey was not undertaken in 1995, a survey is planned for June here on in.

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LEAFLET

INFORMATION 1-800-333-0371

FEUILLET

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December 1996

Preliminary Fatality Statistics

During the first six months of 1996, 1,273 road users died in reportable traffic collisions in Canada. This represents a decrease of 9.9% over the number of traffic deaths recorded during the same period last year, and a decrease of 11.8% compared to the average number of fatalities for this period during the last three years.

During this period, the number of motor vehicle drivers and motor vehicle passengers killed in traffic collisions (at 678 and 338) decreased by 8.1% and 18.4% respectively. The number of pedestrians killed during the first six months of 1996 remained virtually unchanged at 175 (a 1.2% increase from 173), while the numbers of motorcyclists and bicyclists killed (at 30 and 14) decreased significantly by 36.2% and 50.0% respectively from the same period in 1995.

The projected traffic fatality total for Canada during 1996 is 2,999. This total represents a decrease of 9.9% over the number of road users killed in 1995, and an 11.8% decrease compared to the average number of traffic fatalities during the previous three years.

1996 Preliminary Fatality Statistics									Percent Change	
	Month						Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
	Jan	Feb	Mar	Apr	May	June				
Nfld.	5	1	2	4	9	0	21	51	61.5	43.2
P.E.I.	0	1	0	1	1	2	5	10	-28.6	-44.4
N.S.	15	9	6	7	5	10	52	140	6.1	40.5
N.B.	5	8	3	8	5	4	33	89	-5.7	-18.9
Que.	63	57	64	31	78	69	362	831	-11.7	-7.3
Ont.	86	73	77	43	63	58	400	909	-9.7	-13.0
Man.	7	7	1	4	2	5	26	70	-55.9	-45.1
Sask.	10	3	7	6	7	10	43	108	-33.8	-29.5
Alta.	30	16	24	20	23	22	135	358	-12.5	-9.1
B.C.	36	29	25	29	28	40	187	411	-22.7	-19.2
Yukon	0	1	0	0	1	1	3	8	50.0	-25.0
N.W.T.	0	1	2	1	1	1	6	14	200.0	260.0
Canada	257	206	211	154	223	222	1,273	2,999	-9.9	-11.8



1996 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for the first six months of 1996.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	140	70	34	2	0	11	257
February	115	52	27	2	0	10	206
March	113	67	25	1	1	4	211
April	84	39	26	0	3	2	154
May	122	49	35	4	10	3	223
June	104	61	28	5	16	8	222
Total	678	338	175	14	30	38	1273

Fatality Trends By Road User Class and Province/Territory - 1995 - 1996

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for the first six months of 1995 and 1996. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1995	1996	% Change	1995	1996	% Change	1995	1996	% Change	1995	1996	% Change	1995	1996	% Change
N.d.	4	12	200.0%	5	4	-20.0%	4	5	25.0%	0	0	-	0	0	-
P.I.	4	3	-25.0%	1	0	-100.0%	0	0	-	1	0	-100.0%	1	2	100.0%
S.	29	30	3.4%	12	17	41.7%	6	4	-33.3%	0	0	-	2	0	-100.0%
B.	19	24	26.3%	10	7	-30.0%	3	2	-33.3%	1	0	-100.0%	2	0	-100.0%
Ge.	181	186	2.8%	98	82	-16.3%	54	53	-1.9%	11	6	-45.5%	17	13	-23.5%
Ct.	236	219	-7.2%	122	111	-9.0%	53	55	3.8%	7	6	-14.3%	8	8	0.0%
Aln.	23	16	-30.4%	17	6	-64.7%	9	4	-55.6%	1	0	-100.0%	1	0	-100.0%
Sk.	29	24	-17.2%	18	9	-50.0%	5	4	-20.0%	2	0	-100.0%	3	0	-100.0%
Aa.	88	70	-20.5%	51	34	-33.3%	15	19	26.7%	2	0	-100.0%	6	4	-33.3%
ED.	123	91	-26.0%	80	64	-20.0%	24	27	12.5%	3	2	-33.3%	7	3	-57.1%
Yk.	1	1	0.0%	0	2	-	0	0	-	0	0	-	0	0	-
N.V.T.	1	2	100.0%	0	2	-	0	2	-	0	0	-	0	0	-
Canada	738	678	-8.1%	414	338	-18.4%	173	175	1.2%	28	14	-50.0%	47	30	-36.2%

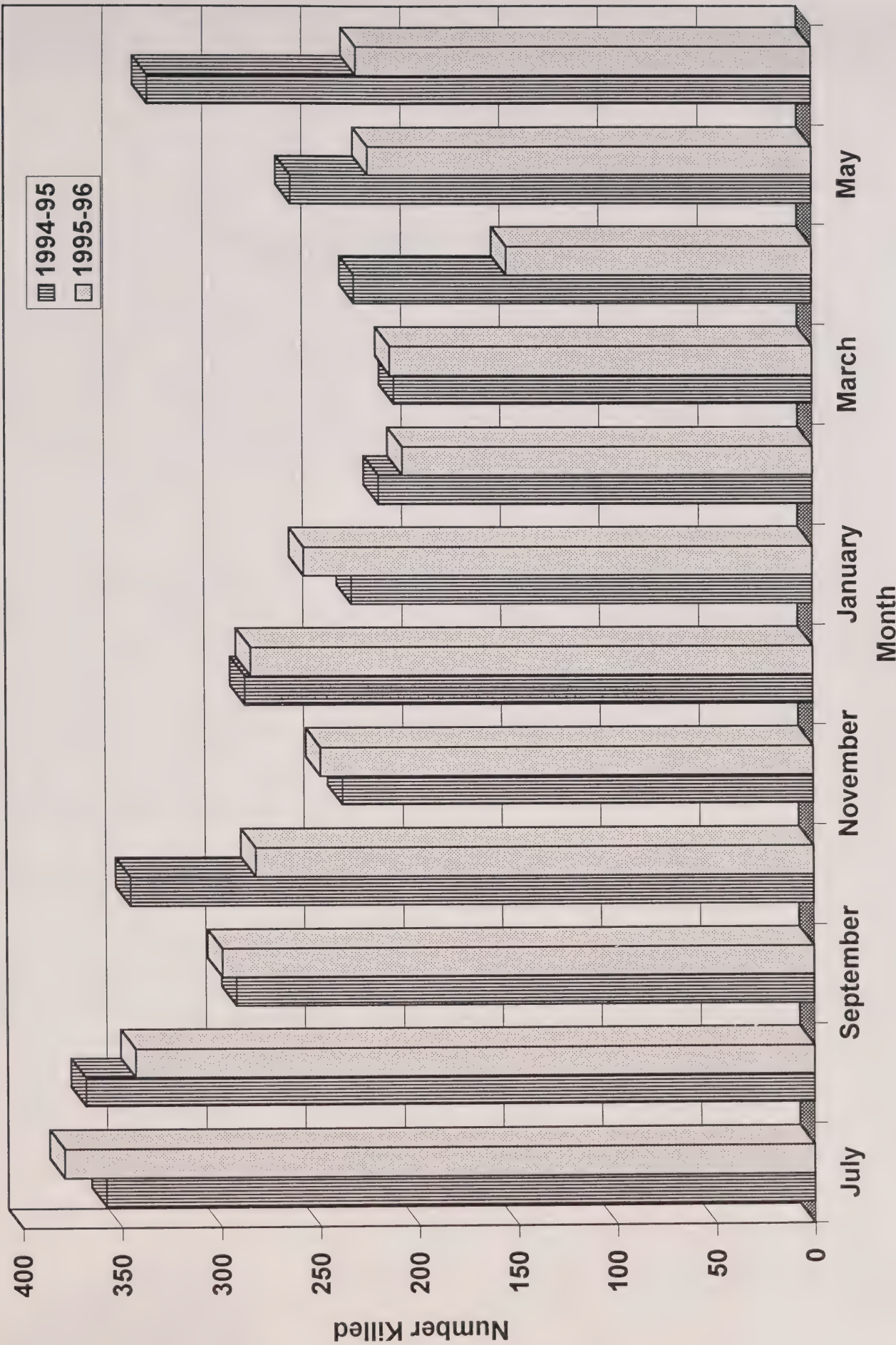
National Trend in Monthly Fatalities

July 1994 - June 1996

The following table and graph summarize fatalities for the last 12-month period (July - June 1996) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	% Change
	1994	1995	1995/1994
July	358	379	5.9%
August	368	343	-6.8%
September	292	299	2.4%
October	345	282	-18.3%
November	238	249	4.6%
December	287	284	-1.0%
	1995	1996	1996/1995
January	233	257	10.3%
February	219	207	-5.5%
March	211	213	0.9%
April	231	154	-33.3%
May	263	224	-14.8%
June	335	230	-31.3%
12 Month Total	3 380	3 121	-7.7%

Persons Killed In Reportable Traffic Collisions In Canada By Month Of Occurrence
1994-95 - 1995-96



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October 1997

Results of Transport Canada's July 1997 Survey of Seat Belt Use in Canada

The National Occupant Restraint Program 2001 (NORP 2001) is an initiative of the Canadian Council of Motor Transport Administrators. NORP 2001 has as its objective to maintain or achieve seat belt usage rates of 95% for all occupants in light-duty vehicles (passenger cars, passenger vans and light-trucks). Transport Canada's contribution to this program is to monitor seat belt usage rates in Canada and this is done through conducting an annual survey. The latest survey of seat belt use took place between July 7 and July 13, 1997.

Results

For Canada as a whole, the estimated proportion of all occupants of light-duty vehicles using seat belts increased by 0.2 percent to 88.9 percent in July 1997, up from 88.7 percent in June 1996 (see Table 1). This estimate is accurate within ± 0.7 percent 19 times out of 20 in repeated samples.

Other highlights of the 1997 survey of all occupants of light-duty vehicle for individual provinces and territories were as follows (in rounded percentages):

- Three provinces reached seat belt use of more than 90 percent, up one province from the results of 1996.
- Newfoundland, Quebec and Saskatchewan led the country with identical rates of 92 percent of those surveyed buckling up, followed by Ontario and British Columbia at identical 89 percent.
- Seat belt wearing rates for other provinces and territories were Nova Scotia and New Brunswick both at 87 percent, Manitoba, at 85 percent, Alberta at 84 percent, Prince Edward Island and Yukon both at 83 percent, while the North West Territories rate come in at 64 percent.

In this year's survey, all 10 provinces achieved belt use rates of more than 83 percent. These are the results of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.



Light Trucks and Passenger Vans

Table 3 presents the survey results of seat belt use by type of vehicle. As done in previous surveys, this year's survey distinguished passenger vans from light trucks. The results showed that the use of seat belts by all occupants was 90 percent in passenger vans and 81 percent in light trucks. Seat belt use by passenger van drivers varied from 66 percent in North West Territories to 93 percent in Saskatchewan; use by drivers of light trucks varied from 54 percent in North West Territories to 94 percent in Newfoundland. These two categories of vehicles accounted for 28.4 percent of the vehicles included in the survey.

Survey Method

The July 1997 survey was undertaken at 241 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys. The observation techniques in the survey were identical to those of the 1989 to 1996 surveys. Information was collected on belt use by all occupants of the vehicle and daytime light use of the vehicle.

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Results of July 1997 Survey of Seat Belt Use in Canada

TABLE 1

Estimates of Seat Belt Use From Annual Surveys 1992-1997
% of all Occupants Wearing Seat Belts in Light-Duty Vehicles

Prov./ Terr.	1992 June	1993 June	1994 June	1996 June	1997 July
Nfld.	90.4	94.5	93.6	91.9	92.4
P.E.I.	76.9	77.8	84.5	87.5	82.6
N.S.	82.1	83.5	83.2	88.2	87.1
N.B.	77.9	82.1	84.9	86.6	86.5
Que.	86.0	88.8	89.8	90.3	91.7
Ont.	76.6	79.4	86.3	89.9	89.2
Man.	76.5	80.2	82.6	82.4	84.8
Sask.	88.7	89.4	87.7	89.6	91.7
Alta.	80.3	81.0	83.1	85.1	83.7
B.C.	87.1	86.4	88.3	88.7	89.4
Y.T.	60.1	72.8	68.2	81.2	83.4
N.W.T.	58.7	51.5	67.4	54.9	64.3
Canada	81.4	83.4	86.8	88.7	88.9

TABLE 2

Estimates of Seat Belt Use From Annual Surveys 1989-1997

% of Car Drivers Wearing Seat Belts

	1989	1990	1991	1991	1992	1992	1993	1993	1994	1994	1996	1997
Prov./ Terr.	Oct.	Oct.	June	Oct.	June	Oct.	June	Oct.	June	Oct.	June	July
Nfld.	64.6	84.2	91.6	90.6	93.9	94.8	96.7	97.5	95.7	95.7	94.3	95.2
P.E.I.	72.7	65.2	74.7	78.7	81.8	81.4	83.4	81.5	90.2	90.5	91.8	88.0
N.S.	79.1	83.4	83.9	86.3	85.5	86.3	87.4	86.3	87.0	90.5	91.2	90.1
N.B.	64.4	76.9	81.9	83.2	81.3	81.3	85.6	86.2	88.9	92.1	89.5	91.9
Que.	81.6	93.5	92.4	92.8	91.3	91.8	92.6	92.6	92.1	94.4	93.2	93.8
Ont.	70.8	71.6	79.7	83.2	80.5	84.1	84.0	83.6	88.8	91.0	92.3	91.4
Man.	79.3	73.4	79.4	79.9	81.6	80.2	82.9	83.3	86.1	85.8	85.0	87.3
Sask.	87.7	91.5	91.5	90.6	93.9	93.8	93.7	95.4	92.7	92.7	94.0	93.9
Alta.	44.6	88.1	84.4	83.2	86.3	84.8	86.6	88.3	87.8	88.5	89.8	87.5
B.C.	85.2	88.3	87.0	84.9	91.1	90.6	91.4	91.3	92.7	92.0	92.6	92.0
Y.T.			24.5*	74.8	58.8	84.0	80.8	78.3	67.6	79.2	87.5	87.0
N.W.T.			74.4*	75.6	64.7	69.5	59.8	60.2	75.5	77.9	57.8	73.0
Canada	73.9	81.9	85.1	86.0	85.9	87.1	87.8	87.8	90.1	91.6	91.9	91.5

* Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

TABLE 3

Estimates of Seat Belt Use by Type of Vehicles and by Driver and Occupants

Prov./ Terr.	Passenger Cars		Passenger Vans		Light Trucks		Total Light-duty vehicles*	
	Driver	All Occupants	Driver	All Occupants	Driver	All Occupants	Driver	All Occupants
Nfld.	95.2	92.4	94.2	91.0	96.0	94.1	95.2	92.4
P.E.I.	88.0	84.8	79.8	78.1	72.7	71.0	85.3	82.6
N.S.	90.1	88.6	88.4	86.5	74.7	74.7	88.3	87.1
N.B.	91.9	87.5	89.5	85.6	81.6	81.4	90.3	86.5
Que.	93.8	91.6	92.9	92.8	88.4	89.8	93.5	91.7
Ont.o	91.4	89.8	90.6	89.4	80.3	78.4	90.6	89.2
Man.	87.3	85.4	87.6	85.7	77.0	76.8	86.5	84.8
Sask.	93.9	92.1	93.7	93.0	84.0	83.8	92.9	91.7
Alta.	87.5	85.1	86.6	85.1	72.5	71.8	85.4	83.7
B.C.	92.0	90.7	90.3	89.7	80.0	78.0	90.7	89.5
Y.T.	87.1	81.3	91.6	87.2	82.3	81.5	87.1	83.4
N.W.T.	73.0	70.3	67.4	65.7	56.5	54.4	66.5	64.3
Canada	91.5	89.6	90.6	89.5	81.1	80.3	90.5	88.9

* Light-duty vehicles include passenger cars, passenger vans and light trucks.
Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

December 15, 1997

Pedestrian Fatalities and Injuries 1986 - 1995

Highlights:

- *Over the past 10 years, pedestrian fatalities averaged more than 500 each year and almost 16,000 pedestrians were injured. In 1995, pedestrian fatalities represented 12.4% of all road user fatalities, while injuries accounted for 6.1% of all road user injuries.*
- *Pedestrian fatalities decreased 25% while injuries decreased 8% since 1986.*
- *In the 65+ age group, male pedestrians fatalities decreased 37% from 1986 to 1995 and the number of females killed increased 34%. Elderly persons (over 65) were more likely to be killed, while youngsters (age 5 - 14) were most likely to be injured.*
- *Most pedestrian casualties occurred where no traffic control was present.*
- *The greatest number of pedestrians were killed in collisions with automobiles (58.4%), followed by light trucks and vans (22.3%), single unit trucks greater than 4 536 kg (6.6%) and tractor trailers (4.8%). Among pedestrians injured, 75.3% were involved in collisions with automobiles, 14.8% with light trucks and vans, and 2.4% with single unit trucks greater than 4 536 kg.*
- *The greatest numbers of pedestrians were killed between the hours of five p.m. and eight p.m., and the highest frequencies of pedestrian injuries occurred between three and six in the late afternoon. Pedestrian fatalities and injuries occurred most frequently in the fall months of October, November and December.*
- *In 1995, 303 fatally injured pedestrians were tested for alcohol use, and 41% (125 of those tested) had been drinking, with 103 (34%) of those tested having a blood alcohol concentration over the legal limit (80mg%). Furthermore, 77 of these 103 pedestrians had BAC's greater than 150 mg%.*

This document presents pedestrian fatalities and injuries resulting from collisions with road motor vehicles. From 1986 to 1995, a total of 5,179 pedestrians have been killed by motor vehicles and 157,703 have been injured (including Manitoba 1989 data). As an average, 518 pedestrians were killed per year, with 1987 having the highest count (638) and 1995 recording the lowest number killed (415). In 1995, pedestrian fatalities represented 12.4% of all road user fatalities. An average of 15,770 pedestrians were injured each year, with 1988 having the highest number of pedestrians injured at 17,006 and 1993 recording the lowest number injured at 14,733. Pedestrian injuries accounted for 6.1% of all road user injuries in 1995. While the numbers of pedestrians killed and injured have shown some increases and decreases throughout the period covered, overall they have decreased 25% in fatalities and 8% in injuries since 1986.

**Table 1. Male Pedestrians Killed by Age Group
1986, 1995 and 10-Year Averages**

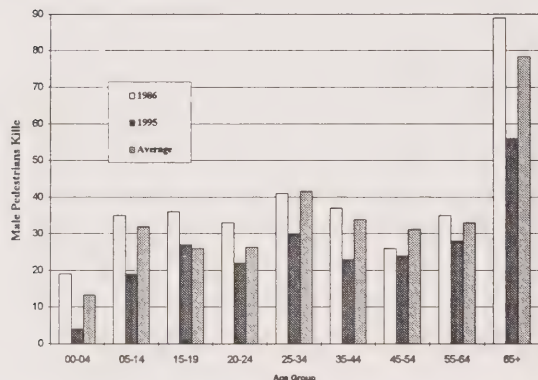
Age Group	1986	1995	10-Year Averages
00-04	19	4	13.3
05-14	35	19	32.0
15-19	36	27	26.0
20-24	33	22	26.3
25-34	41	30	41.6
35-44	37	23	33.9
45-54	26	24	31.2
55-64	35	28	33.0
65+	89	56	78.4
Unknown	6	3	3.6
Total	357	236	319.3

**Table 2. Female Pedestrians Killed by Age Group
1986, 1995 and 10-Year Averages**

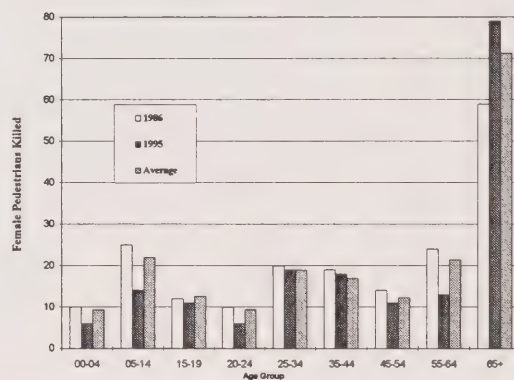
Age Group	1986	1995	10-Year Averages
00-04	10	6	9.3
05-14	25	14	21.9
15-19	12	11	12.6
20-24	10	6	9.4
25-34	20	19	18.9
35-44	19	18	16.9
45-54	14	11	12.3
55-64	24	13	21.4
65+	59	79	71.3
Unknown	2	2	2.2
Total	195	179	196.2

Tables 1 and 2 show the numbers of male and female pedestrians killed by age group for 1986, 1995 and the 10-year averages. Most noteworthy are both male and female pedestrians killed in the 65+ age group. While the number of males killed in this age group decreased 37% from 1986 to 1995, the number of 65+ females killed increased 34%. This occurred during the period when total pedestrians killed decreased 25%. All other age groups for both sexes have improved when looking at 1986 and 1995. Figures 1 and 2 display the numbers from the above tables.

**Figure 1. Male Pedestrians Killed by Age Group
1986, 1995 and 10-Year Averages**



**Figure 2. Female Pedestrians Killed by Age Group
1986, 1995 and 10-Year Averages**

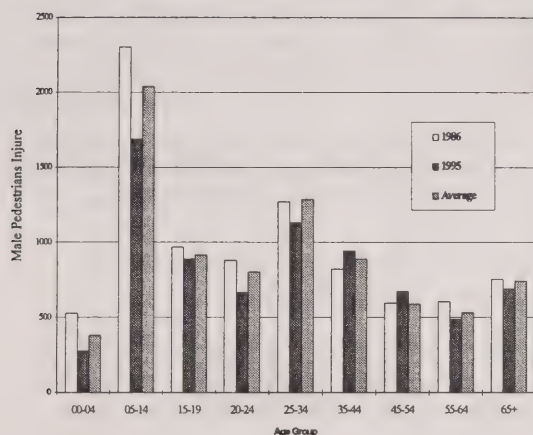


Tables 3 and 4 show the number of male and female pedestrians injured by age group for 1986, 1995 and the 10-year averages. In contrast to the male and female pedestrians in the 65+ age group killed ranking the highest in the 10-year averages, the male pedestrians injured in the 65+ group ranked sixth and the females in that group ranked third. In the male pedestrians injured, the greatest number were in the 05-14 age category, followed by the 25-34 and 15-19 age groups. The ranking for male pedestrians injured in 1995 was slightly different. In the female pedestrians injured, the greatest numbers were, in order, 05-14, 25-34, 65+ and 15-19 year olds. The numbers are displayed in Figures 3 and 4.

**Table 3. Male Pedestrians Injured by Age Group
1986, 1995 and 10-Year Averages**

Age Group	1986	1995	10-Year Averages
00-04	528	275	381.3
05-14	2303	1689	2040.5
15-19	969	891	917.3
20-24	881	667	803.0
25-34	1270	1131	1288.0
35-44	822	945	890.1
45-54	596	674	588.5
55-64	605	488	533.2
65+	755	689	742.2
Unknown	258	356	300.8
Total	8987	7805	8484.9

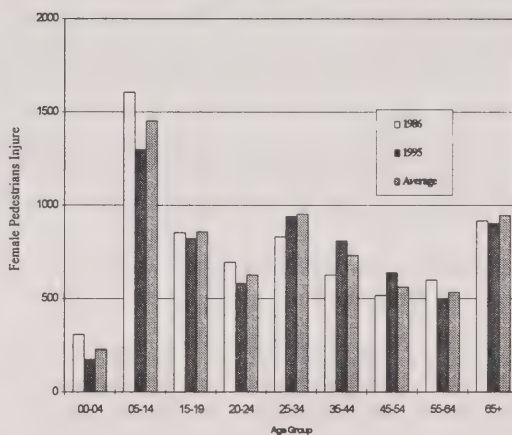
**Figure 3. Male Pedestrians Injured by Age Group
1986, 1995 and 10-Year Averages**



**Table 4. Female Pedestrians Injured by Age Group
1986, 1995 and 10-Year Averages**

Age Group	1986	1995	10-Year Averages
00-04	307	174	228.7
05-14	1605	1299	1451.9
15-19	853	823	859.2
20-24	695	583	627.7
25-34	832	942	953.5
35-44	627	809	733.7
45-54	518	640	562.6
55-64	601	501	533.9
65+	918	904	948.1
Unknown	199	270	244.4
Total	7155	6945	7143.7

**Figure 4. Female Pedestrians Injured by Age Group
1986, 1995 and 10-Year Averages**



The population of Canada rose from 26.2 million in 1986 to 29.6 million in 1995, a 13.0% increase. Males increased 12.8% to 14.7 million, while females increased 13.3% to 14.9 million in 1995. It is interesting to note the significant increases in both males and females in the 35-44 and 45-54 age groups from 1986 to 1995, as well as in the 65+ age group. The male and female populations are displayed by age group in Figures 5 and 6.

Figure 5. Male Population of Canada by Age Group, 1986 and 1995

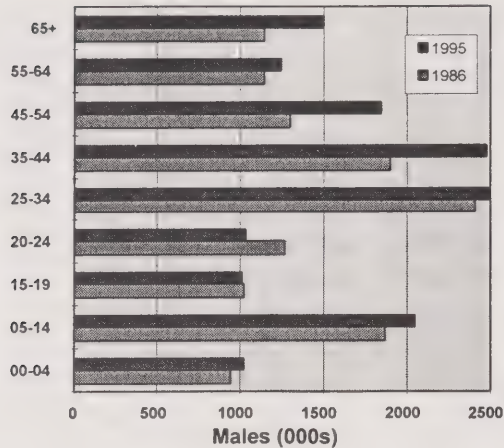
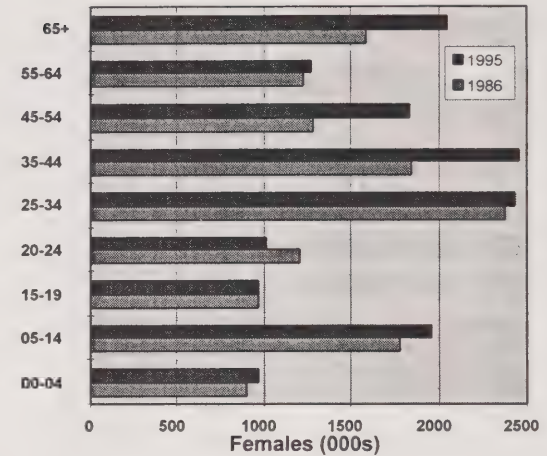


Figure 6. Female Population of Canada by Age Group, 1986 and 1995



Tables 5 and 6 show the numbers of pedestrians killed and injured per 100,000 population. In most age categories, the numbers of pedestrians killed and injured per 100,000 population have decreased. The exceptions were females killed in the 65+ age group which increased, and in the 25-34 age group which remained unchanged. Exceptions in the injured pedestrians were females in the 20-24 and 25-34 age groups. Male pedestrians killed per 100,000 population in the 65+ age group decreased by more than 50%, partially due to the reduction in the actual number of males killed in this category and partially due to the strong growth in the 65+ male population. Female pedestrians killed per 100,000 population showed only a marginal increase in 1995 over 1986 even though there was a significant increase in the actual number of females killed. This was offset by strong population growth in the 65+ female population.

Table 5. Pedestrians Killed by Age Group per 100,000 Population

Age Group	Male		Female	
	1986	1995	1986	1995
00-04	2.0	0.4	1.1	0.6
05-14	1.9	0.9	1.4	0.7
15-19	3.5	2.7	1.2	1.1
20-24	2.6	2.1	0.8	0.6
25-34	1.7	1.2	0.8	0.8
35-44	2.0	0.9	1.0	0.7
45-54	2.0	1.3	1.1	0.6
55-64	3.1	2.3	2.0	1.0
65+	7.7	3.7	3.7	3.8
Total	2.7	1.6	1.5	1.2

Table 6. Pedestrians Injured by Age Group per 100,000 Population

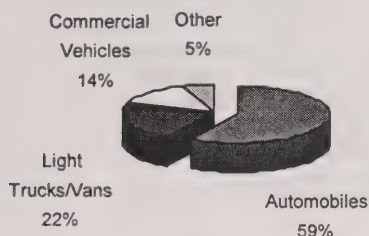
Age Group	Male		Female	
	1986	1995	1986	1995
00-04	55.8	27.0	34.1	18.0
05-14	123.1	82.6	90.1	66.4
15-19	94.5	87.7	87.9	85.2
20-24	69.5	64.3	57.6	57.8
25-34	52.6	45.4	35.0	38.8
35-44	43.4	38.2	33.9	32.9
45-54	45.8	36.5	40.4	34.9
55-64	52.9	39.3	49.0	39.5
65+	65.7	45.8	57.6	44.0
Total	69.1	53.2	54.2	46.5

The greatest numbers of pedestrians were killed and injured where no traffic control was located, likely between intersections. Of the 5,160 pedestrians killed from 1986 to 1995, 70.1% were killed where no traffic control was present and 14.4% where traffic signals were located. Of those pedestrians injured, 55.5% occurred where no traffic control was in place and 24.9% occurred at traffic signals. Among pedestrians killed where no traffic control was present, all age groups from 00-04 to 45-54 inclusive were above the average, that is, greater than 70.1%. Where traffic signals were present, only the 65+ age group at 20.2% represented greater than the average 14.4% killed in all age groups.

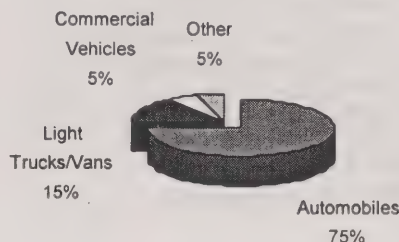
The greatest number of pedestrians were killed in collisions with automobiles (58.4%), followed by light trucks and vans (22.3%), single unit trucks greater than 4 536 kg (6.6%) and tractor trailers (4.8%).

Among pedestrians injured, 75.3% were involved in collisions with automobiles, 14.8% with light trucks and vans, and 2.4% with single unit trucks greater than 4 536 kg. In Figures 7 and 8, the term 'Commercial Vehicles' refers to large single unit trucks, tractor trailers and buses, or vehicles subject to the National Safety Code for Motor Carriers. The percentages of pedestrians killed and injured by automobiles and commercial vehicles showed downward trends over the period covered, while those of pedestrians injured by light trucks and vans were increasing.

**Figure 7. Pedestrians Killed by Vehicle Type
1986 - 1995 Averages**

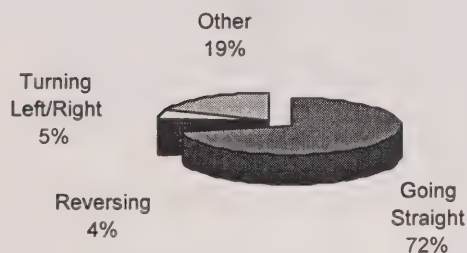


**Figure 8. Pedestrians Injured by Vehicle Type
1986 - 1995 Averages**



Most pedestrians were killed while the vehicle was travelling straight ahead, followed by moving in reverse, and then turning in either direction, as shown in Figure 9. The majority of pedestrian injuries occurred while the vehicle was moving straight ahead, followed by turns in either direction and then moving in reverse (Figure 10).

**Figure 9. Pedestrians Killed by Vehicle
Manoeuvre - 10 Year Averages**



**Figure 10. Pedestrians Injured by Vehicle
Manoeuvre - 10 Year Averages**

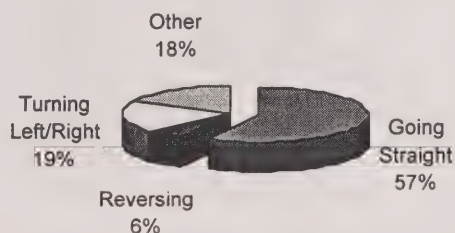
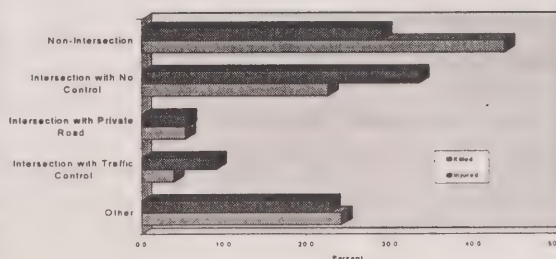


Table 7 and Figure 11 show that most pedestrians were killed at non-intersections (between intersections) with intersections having the next greatest frequency. Most of the pedestrians injured were struck at intersections with non-intersections having the next highest occurrence. Note that the Intersection category does not include those with a private road or with traffic control.

**Table 7. Pedestrians Killed and Injured by
Road Configuration**

Road Configuration	10-Year Averages	
	Killed	Injured
Non-Intersection	226	4565
Intersection	117	5262
Intersection with Private Road	28	863
Intersection with Traffic Control	20	1426
Other	125	3589
Total	516	15705

**Figure 11. Pedestrians Killed and Injured by
Road Configuration**



The greatest numbers of pedestrians were killed between the hours of five p.m. and eight p.m., while the highest frequencies of pedestrian injuries occurred between three and six in the late afternoon based on the 10-year averages, as shown in Figures 12 and 13.

Figure 12. Pedestrians Killed by Time Of Day

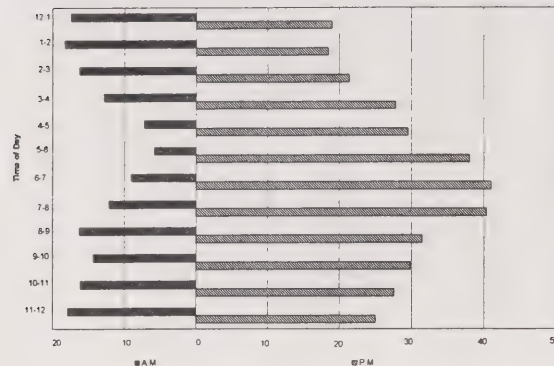
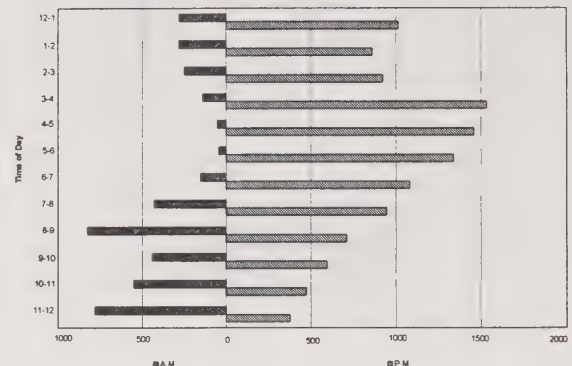


Figure 13. Pedestrians Injured by Time of Day



From 1986 to 1995, pedestrian fatalities and injuries occurred most frequently in the fall months of October, November and December which may be attributable to the shortening of daylight hours. The months with the lowest numbers of pedestrians killed and injured were April and July, respectively.

Tables 8 and 9 are included for their importance in showing the numbers of pedestrians killed and injured not only by age group but also by pedestrian action. The tables show that there are a number of steps that pedestrians could take to protect themselves from injury and death. Some of these include taking more care in crossing at intersections without traffic control, avoiding crossing where the pedestrian has no right of way, avoiding running into the road or playing on the road, and always walking against the traffic where there are no sidewalks. The totals include data where the age of the pedestrians were unknown.

Tables 8 and 9 show that pedestrians could protect themselves from injury or death by taking more care in crossing at intersections without traffic control, avoiding crossing where the pedestrian has no right of way, avoiding running into the road or playing on the road, and always walking against the traffic where there are no sidewalks.

Table 8. Pedestrians Killed by Pedestrian Action by Age Group, 10-Year Totals

Pedestrian Action	00-04	05-14	15-19	20-24	25-34	35-44	45-54	55-64	65+	Total
Intersection-No Control	20	102	40	52	86	78	78	127	468	1063
Intersection: R-O-W	3	21	10	4	9	15	19	25	152	259
Intersection: No R-O-W	7	60	35	29	51	52	42	74	251	615
Fr Behind Parked Cars	19	39	11	5	20	18	12	14	29	168
Running into Road	36	80	21	17	22	21	13	13	37	260
Playing on Roadway	31	16	4	1	2	3	0	0	0	57
Safety Zone	10	18	15	16	21	16	13	17	48	175
Walk Against Traffic	0	20	20	17	22	21	15	16	35	168
Walk With Traffic	5	19	51	40	53	55	31	37	59	352
Between Intersections	4	10	9	6	15	21	20	23	64	172
Other	91	155	170	170	305	208	192	199	354	1871
Total	226	540	386	357	606	508	435	545	1497	5160

R-O-W = Right of Way

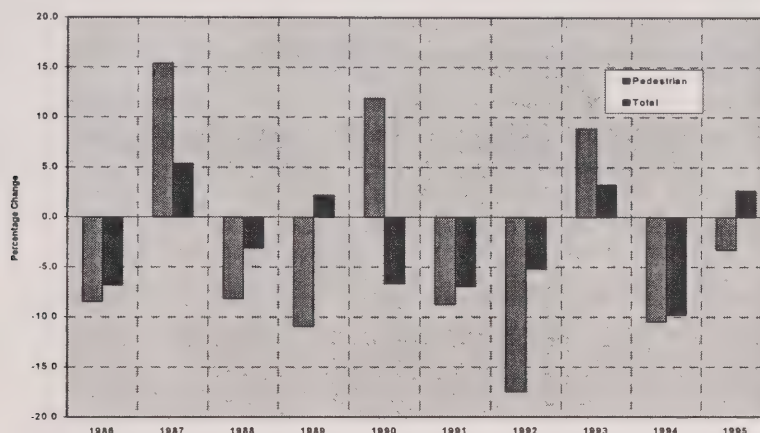
Table 9. Pedestrians Injured by Pedestrian Action by Age Group, 10-Year Totals

Pedestrian Action	00-04	05-14	15-19	20-24	25-34	35-44	45-54	55-64	65+	Total
Intersection-No Control	636	5768	2529	1869	3143	2544	1939	2043	4049	25419
Intersection: R-O-W	449	3619	2657	2567	4360	3378	2739	2629	4254	27298
Intersection: No R-O-Fr Behind Parked Cars	429	4988	2490	1764	2677	2056	1366	1375	2273	20070
Running into Road	1189	4114	757	584	945	645	453	385	582	9945
Playing on Roadway	1059	5199	1058	640	785	473	240	177	240	10057
Safety Zone	362	1074	182	64	30	18	12	4	6	1812
Walk Against Traffic	187	795	866	671	1116	739	543	443	765	6367
Walk With Traffic	50	367	473	302	373	309	214	221	292	2708
Between Intersections	57	727	1184	628	807	567	414	353	388	5301
Other	109	719	359	342	454	338	264	264	521	3565
Total	1579	7584	5222	4892	7742	5190	3336	2788	3553	44502
Total	6106	34954	17777	14323	22432	16257	11520	10682	16923	157044

R-O-W = Right of Way

Figure 14 shows the annual percentage changes from 1985 to 1995 in pedestrian and total road user fatalities.

Figure 14. Trends in Pedestrian and Total Road User Fatalities 1985 - 1995



A total of 303 fatally injured pedestrians were tested for alcohol use in 1995. Of those, 125 people (41%) had been drinking and 103 (34%) of those had a blood alcohol concentration (BAC) greater than the legal limit of 80 mg%.

Alcohol was most frequently detected among pedestrians age 20-25. In this age group 29 fatally injured pedestrians were tested and of these 76% were above the legal limit. Among fatally injured pedestrians, 53% males had been drinking. In contrast, 22% of fatally injured female pedestrians tested showed evidence of alcohol. Of fatally injured pedestrians (125) that had been drinking, 82% (103) had BACs > 80 mg% and 77 had BACs > 150 mg%.

Source: Transport Canada, Road Safety and Motor Vehicle Regulation, TRAIID database.

Traffic Injury Research Foundation of Canada, Alcohol Use Among Drivers and Pedestrians Fatally Injured In Motor Vehicle Accidents: Canada 1995.

Note: Manitoba 1989 data are not included in Tables or Figures unless otherwise indicated.

For further information, please contact Janet Boufford at (613) 998-1946.

December 1997

Preliminary Fatality Statistics

During the first six months of 1997, 1,313 road users died in reportable traffic collisions in Canada. This represents a decrease of 0.9% over the number of traffic deaths recorded during the same period last year, and a decrease of 5.2% compared to the average number of fatalities for this period during the last three years.

During this period, the number of motor vehicle drivers and motor vehicle passengers killed in traffic collisions (at 680 and 342) increased by 0.3% and 1.2% respectively. The number of pedestrians killed during the first six months of 1997 decreased to 160 (an 8.6% decrease from 175), while the numbers of motorcyclists and bicyclists killed (at 37 and 28) increased significantly by 23.3% and 100.0% respectively from the same period in 1996.

The projected traffic fatality total for Canada during 1997 is 3,055. This total represents a decrease of 0.9% over the number of road users killed in 1996, and a 5.2% decrease compared to the average number of traffic fatalities during the previous three years.

1997 Preliminary Fatality Statistics									Percent Change	
	Month						Cumulative Total	Annual Projection	Jan-June Last Year	Jan-June Last 3 Years
	Jan	Feb	Mar	Apr	May	June				
Nfld.	2	5	4	4	4	5	24	48	0.0	33.3
P.E.I.	1	4	1	0	1	5	12	31	200.0	71.4
N.S.	7	10	5	8	8	7	45	107	-13.5	3.1
N.B.	12	7	12	6	8	4	49	150	58.1	58.1
Que.	60	38	42	45	60	82	327	749	-13.0	-13.0
Ont.	68	71	63	52	65	70	389	858	-9.5	-12.1
Man.	17	3	10	0	13	7	50	134	66.7	18.1
Sask.	5	8	13	7	18	20	71	195	59.1	32.9
Alta.	17	24	35	37	29	21	163	382	9.4	-0.2
B.C.	20	32	25	25	43	25	170	365	-11.0	-22.7
Yukon	0	0	2	0	1	0	3	10	0.0	0.0
N.W.T.	0	0	7	0	2	1	10	26	66.7	233.3
Canada	209	202	219	184	252	247	1,313	3,055	-0.9	-5.2

1997 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for the first six months of 1997.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	121	48	23	0	1	16	209
February	106	53	31	0	0	12	202
March	114	65	29	1	1	9	219
April	101	41	25	4	6	7	184
May	124	66	27	6	13	16	252
June	114	69	25	17	16	6	247
Total	680	342	160	28	37	66	1313

Fatality Trends By Road User Class and Province/Territory - 1996 - 1997

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory for the first six months of 1996 and 1997. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1996	1997	Change	1996	1997	Change	1996	1997	Change	1996	1997	Change	1996	1997	Change
	12	5	-58.3%	4	1	-75.0%	5	2	-60.0%	0	0	0.0%	0	0	0.0%
I.	3	8	166.7%	0	2	N/A	0	2	N/A	0	0	0.0%	2	0	-100.0%
	30	21	-30.0%	17	20	17.6%	4	4	0.0%	0	0	0.0%	0	0	0.0%
	24	22	-8.3%	7	18	157.1%	2	5	150.0%	0	0	0.0%	0	3	N/A
	186	151	-18.8%	82	76	-7.3%	53	48	-9.4%	6	15	150.0%	13	12	-7.7%
	219	235	7.3%	111	89	-19.8%	55	43	-21.8%	6	8	33.3%	8	10	25.0%
I.	16	24	50.0%	6	15	150.0%	4	7	75.0%	0	1	N/A	0	0	0.0%
k.	24	34	41.7%	9	23	155.6%	4	5	25.0%	0	2	N/A	0	2	N/A
	70	90	28.6%	34	44	29.4%	19	17	-10.5%	0	1	N/A	4	2	-50.0%
	91	83	-8.8%	64	50	-21.9%	27	25	-7.4%	2	1	-50.0%	3	8	166.7%
	1	1	0.0%	2	2	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
/T.	2	6	200.0%	2	2	0.0%	2	2	0.0%	0	0	0.0%	0	0	0.0%
ada	678	680	0.3%	338	342	1.2%	175	160	-8.6%	14	28	100.0%	30	37	23.3%

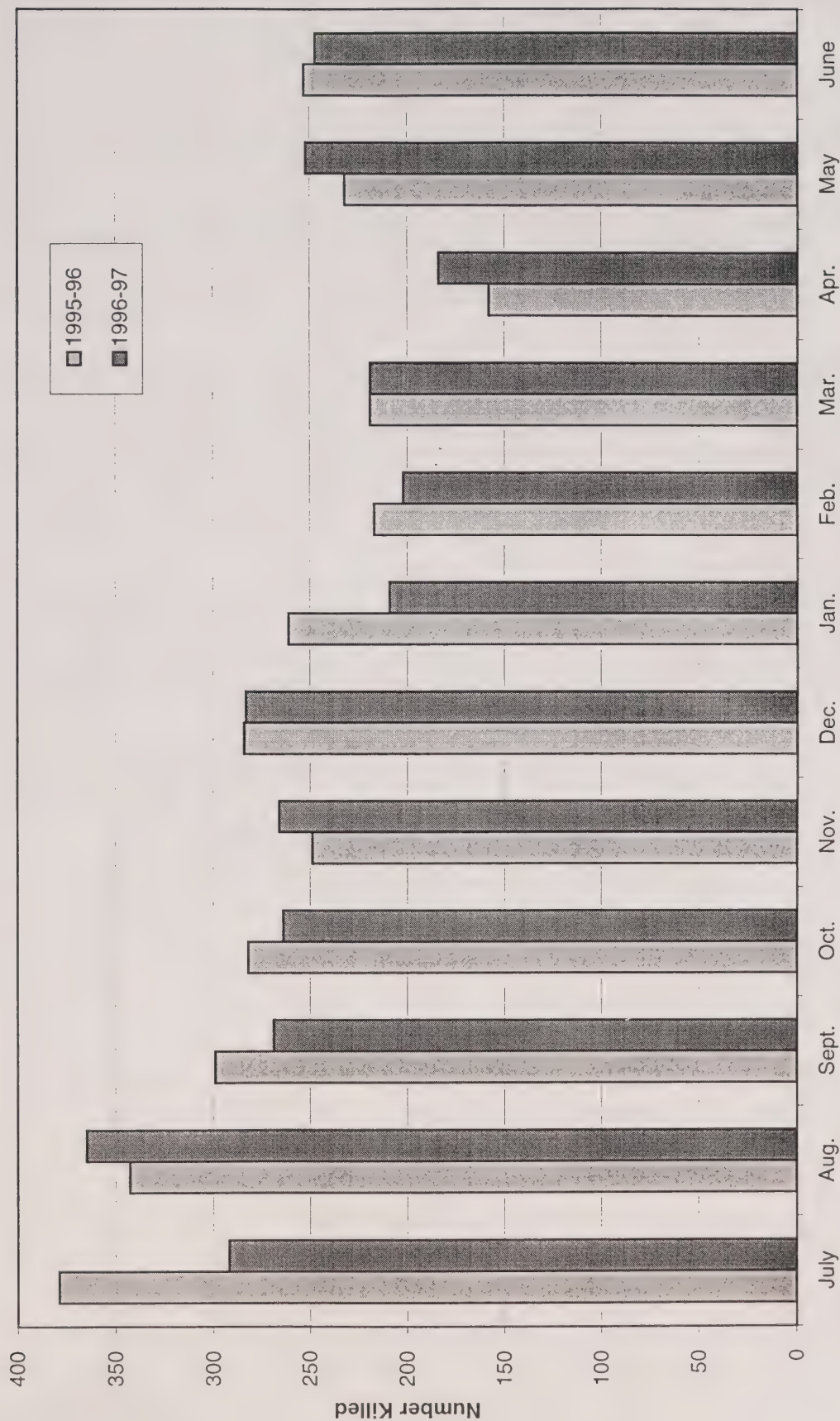
National Trend in Monthly Fatalities

July 1995 - June 1997

The following table and graph summarize fatalities for the last 12-month period (July 1996 - June 1997) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities	Fatalities	Change
	1995	1996	1996/1995
July	379	292	-23.0%
August	343	365	6.4%
September	299	269	-10.0%
October	282	264	-6.4%
November	249	266	6.8%
December	284	283	-0.4%
	1996	1997	1997/1996
January	261	209	-19.9%
February	217	202	-6.9%
March	219	219	0.0%
April	158	184	16.5%
May	232	252	8.6%
June	253	247	-2.4%
12 Month Total	3 176	3 052	-3.9%

Persons Killed in Reportable Traffic Collisions In Canada By Month of Occurrence 1995-96 - 1996-97



School Bus Collisions 1986-1995

"An average of 5 school-age children die in school bus-related traffic collisions each year and 386 are injured - 1 school bus occupant and 4 pedestrians killed; and 334 school bus occupants and 52 pedestrians injured."

A school bus-related collision is a collision which involves, either directly or indirectly, a school bus-type vehicle, or a vehicle functioning as a school bus, transporting children to or from school or school-related activities.

Since 1986 there have been 1,806,380 casualty-producing traffic collisions. Approximately 0.3 percent were classified as school bus-related.

Since 1986, 215 people have died and 11,084 have been injured in school bus-related collisions - an average of 22 fatalities and 1,108 injuries per year. Most of the people who lost their lives in those collisions (67 percent) were occupants of involved vehicles other than school buses. Non-occupants (pedestrians, bicyclists, etc.) accounted for 25 percent of the deaths, and school bus occupants accounted for 8 percent (drivers 2 percent, passengers 6 percent). Most of the people who were injured in these collisions were school bus occupants, which accounted for 46 percent (drivers 10 percent, passengers 36 percent), or were occupants of other vehicles involved (47 percent). Non-occupants (pedestrians, bicyclists, etc.) accounted for 7 percent of the injuries.

Since 1986, 41 school-age pedestrians (less than 19 years old) have died in school bus-related collisions and 520 have been injured. Four-fifths (80 percent) were killed when struck by school buses or vehicles functioning as school buses, and one-fifth (20 percent) when struck by other vehicles involved in the collisions. More than half (59 percent) of all school-age pedestrians killed in school bus-related collisions were between the ages of 5 and 7. Slightly more than half (53 percent) of all school-age pedestrians injured in school bus-related collisions were between the ages of 5 and 9.

Table 1. School Bus Occupant and Pedestrian Casualties in School Bus-Related Collisions by Age, 1986-1995

Age	School Bus Occupants		Pedestrians	
	Killed	Injured	Killed	Injured
1	0	6	0	1
2	0	8	1	7
3	0	19	2	5
4	0	51	7	14
5	1	143	7	46
6	0	158	11	87
7	0	237	6	55
8	1	236	3	45
9	1	326	1	41
10	1	317	0	34
11	2	340	0	19
12	1	342	2	29
13	0	331	0	44
14	0	239	1	27
15	0	197	0	29
16	0	179	0	17
17	1	151	0	8
18	0	57	0	12
19+	8	1417	13	186
UU	0	341	1	16
Total	16	5095	55	722

"From 1986 to 1995, more than half (59 percent) of all school-age pedestrians killed in school bus-related collisions were 5 to 7 years old, and slightly more than half (53 percent) of all school-age pedestrians injured in school bus-related collisions were 5 to 9 years old."

On average, 3 school-age pedestrians are killed and 38 are injured by school buses (or vehicles used as school buses) each year, and 1 is killed and 14 are injured by other vehicles involved in school bus-related collisions.

More school-age pedestrians are killed or injured in the afternoon than in the morning, with one-third of the casualties occurring in collisions between 3:00 and 4:00 PM.

Table 2. School-Age Casualties in School Bus-Related Collisions by Time of Day, 1986-1995

Time of Day	School Bus Occupants		Pedestrians		Total	
	Killed	Injured	Killed	Injured	Killed	Injured
12:00-6:59 AM	0	18	0	5	0	23
7:00-7:59 AM	4	228	1	21	5	249
8:00-8:59 AM	2	1148	5	93	7	1241
9:00-9:59 AM	0	241	1	4	1	245
10:00-10:59 AM	0	47	0	2	0	49
11:00-11:59 AM	0	149	4	41	4	190
12:00-12:59 PM	0	149	6	37	6	186
1:00-1:59 PM	0	41	0	8	0	49
2:00-2:59 PM	0	114	1	19	1	133
3:00-3:59 PM	1	719	15	177	16	896
4:00-4:59 PM	0	405	8	93	8	498
5:00-11:59 PM	1	67	0	15	1	82
Unknown	0	11	0	5	0	16
Total	8	3337	41	520	49	3857

Between 1986 and 1995, 2,013 collisions occurred in which at least one occupant of a school bus or a vehicle functioning as a school bus died or was injured. The vast majority of those collisions (80 percent) involved another vehicle. In the 395 single-vehicle collisions, 1 occupant was killed (a driver) and 1,315 were injured (183 drivers and 1,132 passengers). In the 1,618 multiple-vehicle collisions, 15 were killed (3 drivers and 12 passengers) and 3,780 were injured (897 drivers and 2,883 passengers). In the 395 single-vehicle collisions, the first harmful events were as follows: striking a fixed object (ditch, post, guardrail, etc. - 126 collisions), running off the road (96 collisions), striking a moving object (pedestrian, animal, train, etc. - 23 collisions), overturning (15 collisions), some other non-collision event (74 collisions) and other or unknown event (61 collisions).

In all collisions involving casualties to occupants of a school bus or vehicle used as a school bus, the principal point of impact was somewhat equally divided between the front (16 percent), rear (13 percent), left (22 percent) and right (18 percent).

Table 3. School Bus Occupant Casualties in School Bus-Related Collisions by Principal Impact Point on School Bus, 1986-1995

Primary Impact Location on School Bus	Type of Collision								
	Single-Vehicle			Multiple-Vehicle			Total		
	Collisions	Killed	Injured	Collisions	Killed	Injured	Collisions	Killed	Injured
Front	52	0	125	267	1	695	319	1	820
Top	8	1	39	2	1	4	10	2	43
Rear	5	0	9	254	3	587	259	3	596
Left	47	0	163	379	1	956	426	1	1119
Right	70	0	325	300	4	681	370	4	1006
Undercarriage	13	0	28	3	0	4	16	0	32
Extensive	59	0	312	19	4	47	78	4	359
Unknown	141	0	314	394	1	806	535	1	1120
Total	395	1	1315	1618	15	3780	2013	16	5095

Table 4. School-Age Pedestrian Casualties in School Bus-Related Collisions by Vehicle Maneuver of Striking Vehicle, 1986-1995

Vehicle Maneuver	Striking Vehicle					
	School Bus		Other Vehicle		Total	
	Killed	Injured	Killed	Injured	Killed	Injured
Going Straight	17	196	5	71	22	267
Turning Left	1	32	0	0	1	32
Turning Right	2	48	0	4	2	52
Changing Lanes	0	1	0	1	0	2
Merging or Overtaking	0	2	0	11	0	13
Reversing	1	9	0	1	1	10
Slowing or Stopping	0	30	0	7	0	37
Stopped or Parked	2	6	1	16	3	22
Starting in Traffic	8	29	0	0	8	29
Starting from Parked Position	1	12	0	1	1	13
Entering Parked Position	0	9	0	0	0	9
Swerving to Avoid Object	0	1	0	0	0	1
Unknown	1	9	2	24	3	33
Total	33	384	8	136	41	520

Table 5. School Bus-Related Collisions Involving Occupant Casualties, 1986-1995

Year	Type of Collision								
	Single-Vehicle			Multiple-Vehicle			Total		
	Collisions	Killed	Injured	Collisions	Killed	Injured	Collisions	Killed	Injured
1986	47	0	157	182	5	449	229	5	606
1987	43	0	130	173	0	427	216	0	557
1988	29	1	54	167	0	363	196	1	417
1989	46	0	105	176	3	356	222	3	461
1990	36	0	238	180	1	347	216	1	585
1991	41	0	172	142	3	435	183	3	607
1992	39	0	107	144	0	327	183	0	434
1993	44	0	113	132	0	283	176	0	396
1994	25	0	85	176	3	457	201	3	542
1995	45	0	154	146	0	336	191	0	490
Total	395	1	1315	1618	15	3780	2013	16	5095

Table 6. Casualties in School Bus-Related Collisions, 1986-1995

Year	Occupants of School Bus						Pedestrians			Other Non-Occupants	Occupants of Other Vehicles		Total					
	Driver		Passenger		Total		Struck By School Bus		Struck By Other Vehicle		Total							
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed		Injured	Killed		Injured				
1986	1	111	4	495	5	606	8	55	1	26	9	81	0	2	13	507	27	1196
1987	0	116	0	441	0	557	4	61	0	15	4	76	0	1	4	541	8	1175
1988	1	106	0	311	1	417	6	60	2	16	8	76	0	6	19	524	28	1023
1989	1	123	2	338	3	461	4	69	2	14	6	83	0	1	21	586	30	1131
1990	0	126	1	459	1	585	5	65	2	15	7	80	0	2	14	589	22	1256
1991	1	91	2	516	3	607	7	50	1	23	8	73	0	1	21	560	32	1241
1992	0	109	0	325	0	434	8	52	0	14	8	66	0	4	14	491	22	995
1993	0	88	0	308	0	396	1	46	1	16	2	62	0	2	10	465	12	925
1994	0	102	3	440	3	542	1	41	0	15	1	56	0	4	17	492	21	1094
1995	0	108	0	382	0	490	2	57	0	12	2	69	0	0	11	489	13	1048
Total	4	1080	12	4015	16	5095	46	556	9	166	55	722	0	23	144	5244	215	11084

Preliminary Fatality Statistics

During 1997, 3,036 road users died in reportable traffic collisions in Canada, a decrease of 1.5% from the number of traffic deaths recorded during the previous year, and a decrease of 5.8% compared to the average number of fatalities during the last three years.

During this period, the number of fatally injured motor vehicle drivers and bicyclists (at 1,556 and 66) increased by 1.4% and 11.9%, respectively, while the numbers of motor vehicle passengers, pedestrians and motorcyclists killed in traffic collisions (at 818, 399 and 117) decreased by 1.8%, 13.6% and 8.6%, respectively, when compared to fatalities among the same road user classes during the same period in 1996.

1997 Preliminary Fatality Statistics														Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Total	Last Year	Last 3 Years
Nfld.	1	3	3	2	4	4	3	5	1	1	2	3	32	-31.9	-11.1
P.E.I.	1	4	1	0	1	5	3	0	2	1	1	1	20	5.3	11.1
N.S.	7	10	5	8	8	7	4	11	6	5	6	12	89	-21.2	-14.1
N.B.	12	7	12	6	8	4	15	5	10	10	11	5	105	11.7	10.5
Que.	65	38	42	45	61	84	74	100	55	106	73	53	796	-9.2	-7.5
Ont.	68	71	65	53	74	83	80	99	81	85	64	67	890	-4.2	-8.8
Man.	17	3	10	0	14	8	7	7	9	15	9	7	106	14.0	-6.5
Sask.	5	8	13	7	21	20	15	13	12	14	14	23	165	24.1	12.5
Alta.	18	23	37	38	33	26	41	53	31	40	44	45	429	22.9	12.2
B.C.	20	32	25	25	46	30	42	48	29	30	26	33	386	-4.7	-18.3
Yukon	0	0	2	0	1	0	0	0	0	1	0	0	4	-42.9	-61.3
N.W.T.	0	0	7	0	2	1	2	2	0	0	0	0	14	-6.7	82.6
Canada	214	199	222	184	273	272	286	343	236	308	250	249	3,036	-1.5	-5.8



1997 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for 1997.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	124	50	24	0	0	16	214
February	105	54	31	0	0	9	199
March	115	66	29	1	2	9	222
April	101	43	26	4	6	4	184
May	131	74	35	7	16	10	273
June	130	76	32	16	16	2	272
July	135	73	35	15	21	7	286
August	161	88	45	16	25	8	343
September	116	54	42	2	17	5	236
October	146	108	35	2	13	4	308
November	155	61	29	2	0	3	250
December	137	71	36	1	0	4	249
Total	1 556	818	399	66	116	81	3 036

Fatality Trends By Road User Class and Province/Territory - 1996 - 1997

The following table presents comparisons of preliminary fatality statistics by road user class and province/territory during 1996 and 1997. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1996	1997	% Change	1996	1997	% Change	1996	1997	% Change	1996	1997	% Change	1996	1997	% Change
Nfld.	18	18	0.0%	11	7	-36.4%	16	5	-68.8%	0	1	-	2	1	-50.0%
P.E.I.	12	10	-16.7%	5	4	-20.0%	1	4	300.0%	0	1	-	1	0	-100.0%
N.S.	55	45	-18.2%	33	31	-6.1%	19	10	-47.4%	1	2	100.0%	4	1	-75.0%
N.B.	55	53	-3.6%	17	32	88.2%	14	14	0.0%	1	0	-100.0%	3	5	66.7%
Que.	451	387	-14.2%	190	202	6.3%	133	108	-18.8%	24	27	12.5%	53	40	-24.5%
Ont.	459	472	2.8%	270	219	-18.9%	144	131	-9.0%	20	23	15.0%	29	38	31.0%
Man.	44	55	25.0%	29	27	-6.9%	16	19	18.8%	3	1	-66.7%	1	1	0.0%
Sask.	65	76	16.9%	39	58	48.7%	16	14	-12.5%	1	2	100.0%	4	4	0.0%
Alta.	184	239	29.9%	102	111	8.8%	36	45	25.0%	4	3	-25.0%	10	7	-30.0%
B.C.	181	193	6.6%	132	121	-8.3%	61	46	-24.6%	5	5	0.0%	21	20	-4.8%
Yuk.	4	1	-75.0%	1	3	200.0%	1	0	-100.0%	0	0	-	0	0	-
N.W.T.	6	7	16.7%	4	3	-25.0%	5	3	-40.0%	0	1	-	0	0	-
Canada	1,534	1,556	1.4%	833	818	-1.8%	462	399	-13.6%	59	66	11.9%	128	117	-8.6%

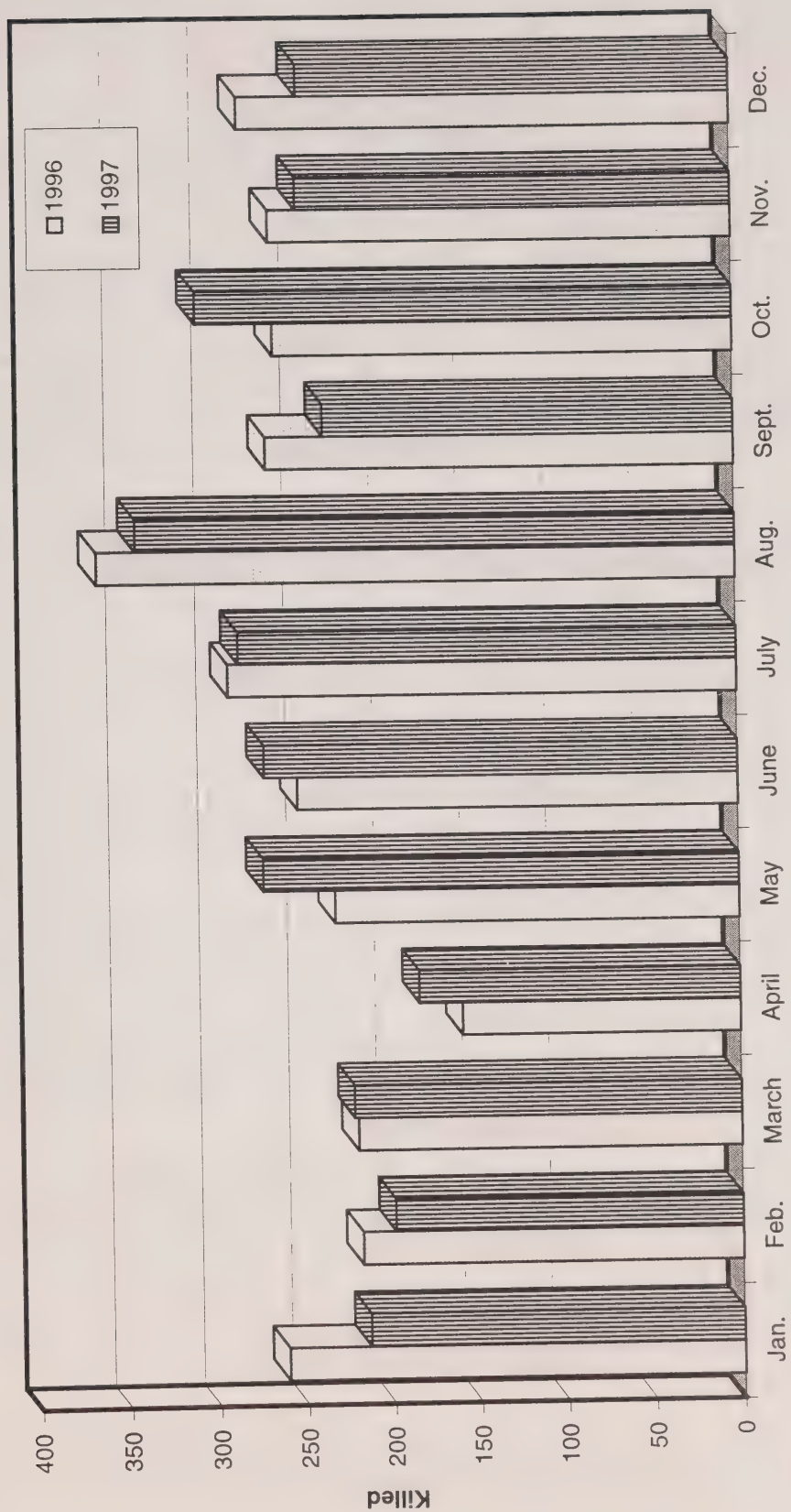
National Trend in Monthly Fatalities

January 1996 - December 1997

The following table and graph summarize fatalities for the last 12-month period (January 1997 - December 1997) and compare these figures with statistics for the corresponding period of the previous year.

	Fatalities	Fatalities	% Change
Month	1996	1997	1997/1996
January	261	214	-18.0%
February	218	199	-8.7%
March	220	222	0.9%
April	159	184	15.7%
May	232	273	17.7%
June	253	272	7.5%
July	292	286	-2.1%
August	365	343	-6.0%
September	269	236	-12.3%
October	264	308	16.7%
November	266	250	-6.0%
December	283	249	-12.0%
12 Month Total	3,082	3,036	-1.5%

Road Users Killed In Reportable Traffic Collisions - Canada - 1996 - 1997





LEAFLET

INFORMATION 1-800-333-0371

FEUILLET

Safety Issues for Canadians: Anti Lock Brake System (ABS)

As a result of numerous complaints to Transport Canada concerning the effectiveness of Anti Lock Brakes (ABS) this leaflet answers common concerns with the systems.

Is my stopping distance shorter with ABS?

No. When braking on wet and dry roads your stopping distance will be about the same as with conventional brakes. However, in gravel, slush, or snow, your stopping distance will be greater than with conventional brakes.

Should I change my driving habits?

Yes. You should allow for a longer stopping distance than conventional brakes when driving on gravel, slush, and snow. Additionally when the ABS is activated continue to maintain steady pressure on the brake pedal and do not pump it.

How can I improve my braking ability?

Installing four snow tires will reduce the stopping distance on slush and snow.

What advantage does my ABS offer?

The directional control of the vehicle is significantly improved since the potential for a brake induced spin-out is eliminated. You are able to maintain steering control because the tires continue to rotate and do not slide.

Sometimes I feel the brake pedal pulse or hear a groaning noise when I brake.

This is normal and indicates that the ABS is active. Some ABS systems give more audio or tactile feedback than others.

How do I know if my vehicle is equipped with ABS?

When you start your vehicle an ABS indicator light will illuminate on the instrument panel for a few seconds.

My ABS light stays on. What should I do?

This indicates the ABS system is not functioning. However the conventional braking system is working normally.

My ABS light and my Brake warning light both stay on. What should I do?

Do not drive this vehicle. Have it towed to your nearest dealer.

For further information contact:

Public Complaints, Recalls and Investigations, Road Safety, Ottawa.

1-800-333-0510 toll free in Canada, or in Ottawa region (613)993-9851.



CA1
T260
-L21

November 1998

Seat Belt Use in Canada - June 1998 Survey Results

The National Occupant Restraint Program 2001 (NORP 2001) is an important element of **Road Safety Vision 2001**—an ambitious partnership approved by federal, provincial and territorial Ministers of Transport to make Canada's roads the safest in the world. The objective of NORP 2001 is to maintain or achieve seat belt usage rates of 95% for all occupants in light-duty vehicles (passenger cars, passenger vans and light-trucks). Transport Canada's contribution to this program of monitoring seat belt usage rates in Canada is done through conducting an annual survey. The latest national survey of seat belt use took place between June 15 and June 21, 1998.

Results

For Canada as a whole, the estimated proportion of all occupants of light-duty vehicles using seat belts decreased by 0.2 percent to 88.7 percent in June 1998, down from 88.9 percent in July 1997 (see Table 1). This estimate is accurate within ± 0.8 percent 19 times out of 20 in repeated samples.

Other highlights of the 1998 survey of all occupants of light-duty vehicles for individual provinces and territories (in rounded percentages) were as follows:

- Three provinces reached seat belt use of 90 percent or more, the same as last year.
- Quebec led the country with a rate of 92 percent, followed by Saskatchewan and British Columbia at an identical rate of 90 percent.
- Seat belt wearing rates for other provinces and territories were Nova Scotia and Ontario both at 89 percent; New Brunswick at 88 percent; Newfoundland at 86 percent; Manitoba at 84 percent; Prince Edward Island at 83 percent; Alberta and Yukon both at 82 percent; and the Northwest Territories at 53 percent.

In this year's survey, all 10 provinces achieved belt use rates of more than 82 percent. This level is the result of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial governments, police forces and road safety associations.

Light Trucks and Passenger Vans

Table 3 presents the survey results of seat belt use by type of vehicle. As in previous surveys, this year's survey distinguished passenger vans from light trucks.

The results showed that:

- The use of seat belts by all occupants was 89 percent in passenger vans and 80 percent in light trucks.
- Seat belt use by all occupants of passenger vans varied from 60 percent in Northwest Territories to 92 percent in Quebec.
- Seat belt use by all occupants of light trucks varied from 40 percent in the Northwest Territories to 92 percent in Quebec.

These two categories of vehicles accounted for 29.2 percent of the vehicles included in the survey.

Survey Method

The June 1998 survey was undertaken at 241 sites selected by province, road type and community size, and was comparable to the samples used in the previous belt use surveys.

For further information write to:

Road Safety Programs Branch
Transport Canada
330 Sparks Street
Tower C, Place de Ville
Ottawa, Ontario
K1A 0N5

www.tc.gc.ca/roadsafety/rsindx_e.htm

Transport Canada
Survey of Seat Belt Use in Canada
June 1998

Table 1: Estimates of seat belt use from annual surveys 1992-1998*

Prov./ Terr.	Percentage of all Occupants Wearing Seat Belts in Light-Duty Vehicles**					
	1992 June (%)	1993 June (%)	1994 June (%)	1996 June (%)	1997 July (%)	1998 June (%)
Nfld.	90.4	94.5	93.6	91.9	92.4	86.4
P.E.I.	76.9	77.8	84.5	87.5	82.6	82.7
N.S.	82.1	83.5	83.2	88.2	87.1	88.5
N.B.	77.9	82.1	84.9	86.6	86.5	87.9
Que.	86.0	88.8	89.8	90.3	91.7	92.3
Ont.	76.6	79.4	86.3	89.9	89.2	89.1
Man.	76.5	80.2	82.6	82.4	84.8	84.4
Sask.	88.7	89.4	87.7	89.6	91.7	89.7
Alta.	80.3	81.0	83.1	85.1	83.7	82.4
B.C.	87.1	86.4	88.3	88.7	89.4	89.7
Y.T.	60.1	72.8	68.2	81.2	83.4	82.1
N.W.T.	68.7	51.5	67.4	54.9	64.3	52.6
Canada	81.4	83.4	86.8	88.7	88.9	88.7

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts

** Light-duty vehicles include passenger cars, passenger vans and light trucks.

Transport Canada
Survey of Seat Belt Use in Canada
June 1998

Table 2: Estimates of seat belt use from annual surveys 1990-1998*

Prov./ Terr.	Percentage of Passenger Car Drivers Wearing Seat Belts											
	1990	1991	1991	1992	1992	1993	1993	1994	1994	1996	1997	1998
	Oct.	June	Oct.	June	Oct.	June	Oct.	June	Oct.	June	July	June
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Nfld.	84.2	91.6	90.6	93.9	94.8	96.7	97.5	95.7	95.7	94.3	95.2	90.8
P.E.I.	65.2	74.7	78.7	81.8	81.4	83.4	81.5	90.2	90.5	91.8	88.0	88.0
N.S.	83.4	83.9	86.3	85.5	86.3	87.4	86.3	87.0	90.5	91.2	90.1	91.2
N.B.	76.9	81.9	83.2	81.3	81.3	85.6	86.2	88.9	92.1	89.5	91.9	91.8
Que.	93.5	92.4	92.8	91.3	91.8	92.6	92.6	92.1	94.4	93.2	93.8	94.7
Ont.	71.6	79.7	83.2	80.5	84.1	84.0	83.6	88.8	91.0	92.3	91.4	91.5
Man.	73.4	79.4	79.9	81.6	80.2	82.9	83.3	86.1	85.8	85.0	87.3	87.6
Sask.	91.5	91.5	90.6	93.9	93.8	93.7	95.4	92.7	92.7	94.0	93.9	94.1
Alta.	88.1	84.4	83.2	86.3	84.8	86.6	88.3	87.8	88.5	89.8	87.5	87.8
B.C.	88.3	87.0	84.9	91.1	90.6	91.4	91.3	92.7	92.0	92.6	92.0	93.2
Y.T.		**24.5	74.8	58.8	84.0	80.8	78.3	67.6	79.2	87.5	87.0	92.2
N.W.T.		**74.4	75.6	64.7	69.5	59.8	60.2	75.5	77.9	57.8	73.0	54.6
Canada	81.9	85.1	86.0	85.9	87.1	87.8	87.8	90.1	91.6	91.9	91.5	91.9

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

** Transport Canada's first seat belt surveys in the Northwest Territories and Yukon Territory.

Transport Canada
Survey of Seat Belt Use in Canada
June 1998

Table 3: Estimates of seat belt use from June 1998 survey, by type of vehicles and by driver and occupants*

Prov./ Terr.	Passenger Cars		Passenger Vans		Light Trucks		Total L-D Vehicles**	
	Driver	All Occ.***	Driver	All Occ.***	Driver	All Occ.***	Driver	All Occ.***
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Nfld.	90.8	87.5	89.3	86.9	81.2	78.0	89.2	86.4
P.E.I.	88.0	84.9	86.7	83.9	69.5	66.9	85.3	82.7
N.S.	91.2	89.6	87.7	87.3	80.0	78.5	89.7	88.5
N.B.	91.8	89.6	88.7	88.1	79.6	78.9	89.5	87.9
Que.	94.7	92.4	93.9	91.8	92.5	91.7	94.5	92.3
Ont.	91.5	89.6	91.2	89.8	79.3	79.0	90.7	89.1
Man.	87.6	84.8	86.9	85.3	80.9	79.0	86.8	84.4
Sask.	94.1	91.4	92.0	89.8	80.8	78.7	92.0	89.7
Alta.	87.8	84.9	83.9	82.3	70.3	65.4	85.1	82.4
B.C.	93.2	90.6	92.2	90.6	78.9	77.5	91.8	89.7
Y.T.	92.2	85.2	83.6	81.9	77.7	71.6	87.3	82.1
N.W.T.	54.6	54.3	58.0	60.2	35.8	40.2	50.7	52.6
Canada	91.9	89.6	90.8	89.2	80.9	79.6	90.8	88.7

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

** Light-duty vehicles, which include passenger cars, passenger vans and light trucks.

*** All occupants

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November 1998

ALCOHOL USE BY DRIVERS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS IN CANADA IN 1996 AND THE PREVIOUS NINE YEARS

Background

This leaflet provides information on the blood alcohol concentrations (BACs) of drivers fatally injured in motor vehicle accidents in the Canadian provinces and territories. The information is derived from the Traffic Injury Research Foundation (TIRF) Fatality Database,¹ which consists of data collected from reports prepared by provincial/territorial coroners and medical examiners, and investigating police officers. Provincial and territorial agencies provide access to these data under cooperative agreements with TIRF.

The data in the TIRF Fatality Database was compiled every year from 1973 to 1996, inclusive, for seven provinces. Since 1987, data have been assembled from all provinces and the territories.

National data on alcohol use among drivers fatally injured in motor vehicle crashes in 1996 are reviewed in the next section. This is followed by an examination of trends in alcohol use among driver fatalities from 1987 to 1996. Before reviewing these sections, the reader should be aware that the following conventions have been adopted in assembling the data for this leaflet.

1. The results are based on victims dying within twelve months of the accident. Most of these victims (93.4%) died less than six hours after the crash.
2. The data presented in Figures 2 to 8 are based on the number of fatally injured drivers who were tested for alcohol.
3. The data include only fatally injured drivers of the principal types of motorized vehicles on public roadways: automobiles, trucks/vans, motorcycles/mopeds and tractor-trailers. Excluded are operators of bicycles and other non-highway vehicles, as well as pedestrians and passengers.

¹ The TIRF Fatality Database is financially supported by the Canadian Council of Motor Transport Administrators (CCMTA) and Transport Canada.

4. Comparisons are made throughout between “drivers who had been drinking” and “drivers who were impaired”. The former includes any driver with a BAC of 1 mg% or greater (i.e., 1 mg of alcohol per 100 ml of blood), and the latter includes any driver with a BAC in excess of 80 mg% (80 mg of alcohol per 100 ml of blood), the legal limit as defined in the *Criminal Code* of Canada.
5. Percentages for less populous jurisdictions are not as reliable as those for the larger ones (i.e., they are more subject to chance variation because there are fewer fatally injured drivers).

Alcohol Use among Fatally Injured Drivers in 1996

Rate of Testing for Alcohol — In order to make reliable statements about the prevalence of alcohol use by drivers killed in road crashes, a high proportion of these drivers must be tested for alcohol. In many countries, the rate of testing is very low, leading to the possibility of bias — i.e., drivers suspected of impairment may be more likely to be tested — which would lead to an overestimate of the prevalence of alcohol. It is generally accepted that conclusions about the prevalence of alcohol based on testing rates below 80% should be regarded with caution.

Fortunately, in Canada, the rate of testing has been uniformly high, so considerable confidence can be placed on the data reported here. To illustrate this, Figure 1 and Table 1 present information on the rate of testing for the presence of alcohol among fatally injured drivers in each Canadian jurisdiction in 1996. In that year, the rate of testing ranged from 72% in Nova Scotia and Newfoundland to 100% in the Northwest Territories. Testing rates were over 90% in four jurisdictions and over 80% in nine jurisdictions. The average across all jurisdictions was 83% — 1,436 of 1,728 fatally injured drivers were tested for the presence of alcohol in their blood. This is comparable to a testing rate of 84% in the previous year.

Drinking Drivers and Impaired Drivers — Figure 2 and Table 2 show the percentage of fatally injured drivers who had been drinking and the percentage who were legally impaired. In Canada, 41.6% of tested drivers had been drinking and 34.9% were legally impaired.

Gender — Of the 1,436 fatally injured drivers tested, 79% were male (figure and table not provided). Among males, 45.8% had been drinking, compared to 25% of the females. Males were also more likely than females to be legally impaired — 38.4% versus 21.2%.

Age — Figure 3 and Table 3 show that drivers between the ages of 21 and 25 were the most likely to have been drinking (56.6%) and to have illegal BACs (47.6%). The percentage of fatally injured drivers who had been drinking and the percentage who were legally impaired declined dramatically in the 46-and-over age groups.

Vehicles — As shown in Figure 4 and Table 4, fatally injured operators of mopeds/motorcycles had the highest incidence of drinking (50%) among the major vehicle types. Drivers of trucks/vans (excluding tractor-trailers) were the most likely to have illegal BACs (41%). The one driver tested in the Other Vehicles category had a BAC of over 80 mg%. The lowest incidence of drinking and illegal BACs was found among tractor-trailer drivers: only 4 of the 32 fatally injured tractor-trailer drivers had consumed alcohol.

Trends over the Past Ten Years

Drinking Drivers and Impaired Drivers — Figures 5 to 8 (and Tables 5 to 8) present data for the ten-year period, 1987 to 1996. Figure 5 and Table 5 show a steady decline in the percentage of fatally injured drivers who had been drinking and the percentage who were legally impaired from 1987 to 1990. This was followed by an increase in 1991 and basically no change in 1992. Since 1992, there has been a decline in the percentage of fatally injured drivers who had been drinking and the percentage who were legally impaired.

Gender — Figure 6 and Table 6 show that over the ten-year period, the incidence of illegal BACs among fatally injured female drivers has been consistently lower than among males. The percentage of males who were legally impaired decreased between 1987 and 1990, increased in 1991, then decreased for four years. In 1996, there was little change from 1995 — 38.4% compared to 38.3%. The trend for women differed slightly from that for men over this ten-year period, especially between 1994 and 1996. During this recent time period, the percentage of legally impaired females increased from 17% to 23.4% before dropping to 21.2%, while the percentage of legally impaired males decreased from 40.7% to 38.3%, then rose slightly to 38.4%.

Age — Figure 7 and Table 7 show that the overall downward trend in alcohol use by fatally injured drivers differs slightly across age groups. The largest decrease over the ten years was among fatally injured drivers aged 26 to 35 — from 54.9% in 1987 to 42.6% in 1996. There were also substantial decreases in the percentage of impaired driver fatalities in the 46-and-over age group, from 29.2% to 20.5%. Among fatally injured drivers under

21 years of age, the percentage who were legally impaired has varied little over the ten-year period. In 1996, fatally injured drivers aged 21 to 25 (47.6%) had the highest incidence of illegal BACs.

Vehicles — Figure 8 and Table 8 show that over the ten-year period, fatally injured drivers of trucks/vans (excluding tractor-trailers) had the highest percentage of illegal BACs, and the percentage of illegal BACs was very comparable for automobile drivers and motorcycle/moped drivers. The percentage of legally impaired motorcycle/moped drivers decreased between 1993 and 1995 before rising in 1996. The percentage of truck/van operators who were legally impaired decreased by about 2% from 1995 to 1996. Among automobile drivers, the incidence of illegal BACs decreased from 1987 to 1990, increased in 1991 and has declined since then. The decline since 1993, however, has been small (35% in 1993 compared to 33% in 1996). Tractor-trailer drivers are not included in Figure 8 and Table 8 because the small number of fatalities in this group results in unreliable year-to-year fluctuations. However, it is worthwhile noting that over this ten-year period, 1995 was the only year in which none of the fatally injured tractor-trailer drivers had consumed alcohol.

For further information contact:

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Figure 1
Percentage of Fatally Injured Drivers
Tested for Alcohol: 1996

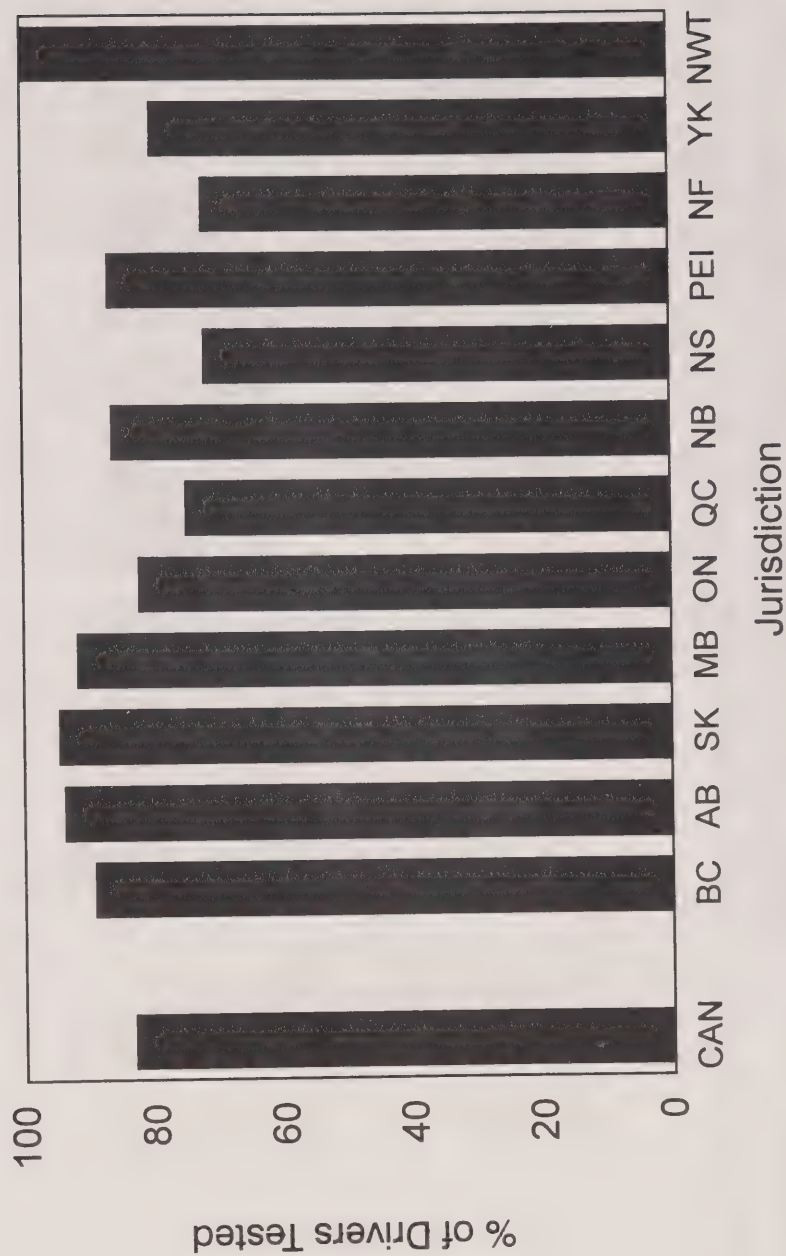
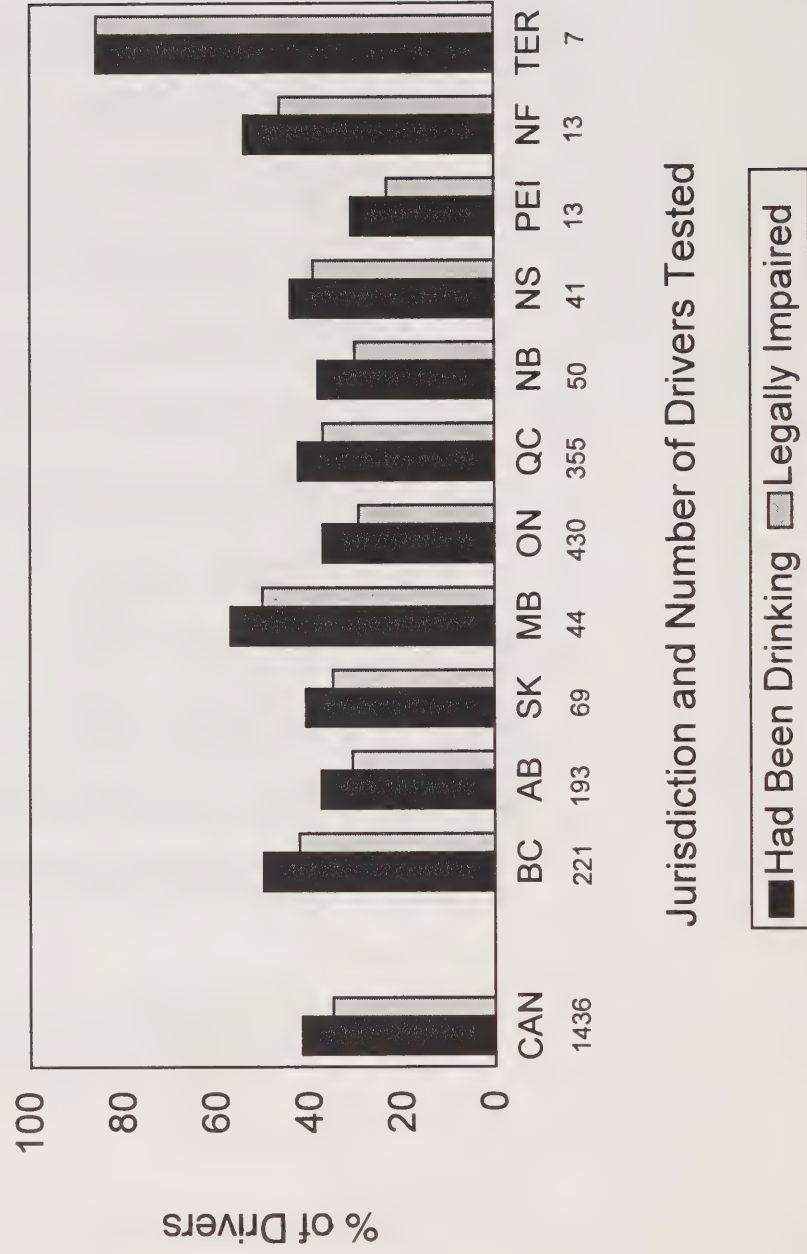


Figure 2
 Percentage of Fatally Injured Drivers Who Had Been Drinking
 (BAC 1 mg%>) and Were Impaired (BAC >80 mg%): 1996



Jurisdiction and Number of Drivers Tested

■ Had Been Drinking □ Legally Impaired

Figure 3
Age of Driver: Percentage of Fatally Injured Drivers Who Had
Been Drinking (BAC 1 mg%>) and Were Impaired (BAC >80 mg%)

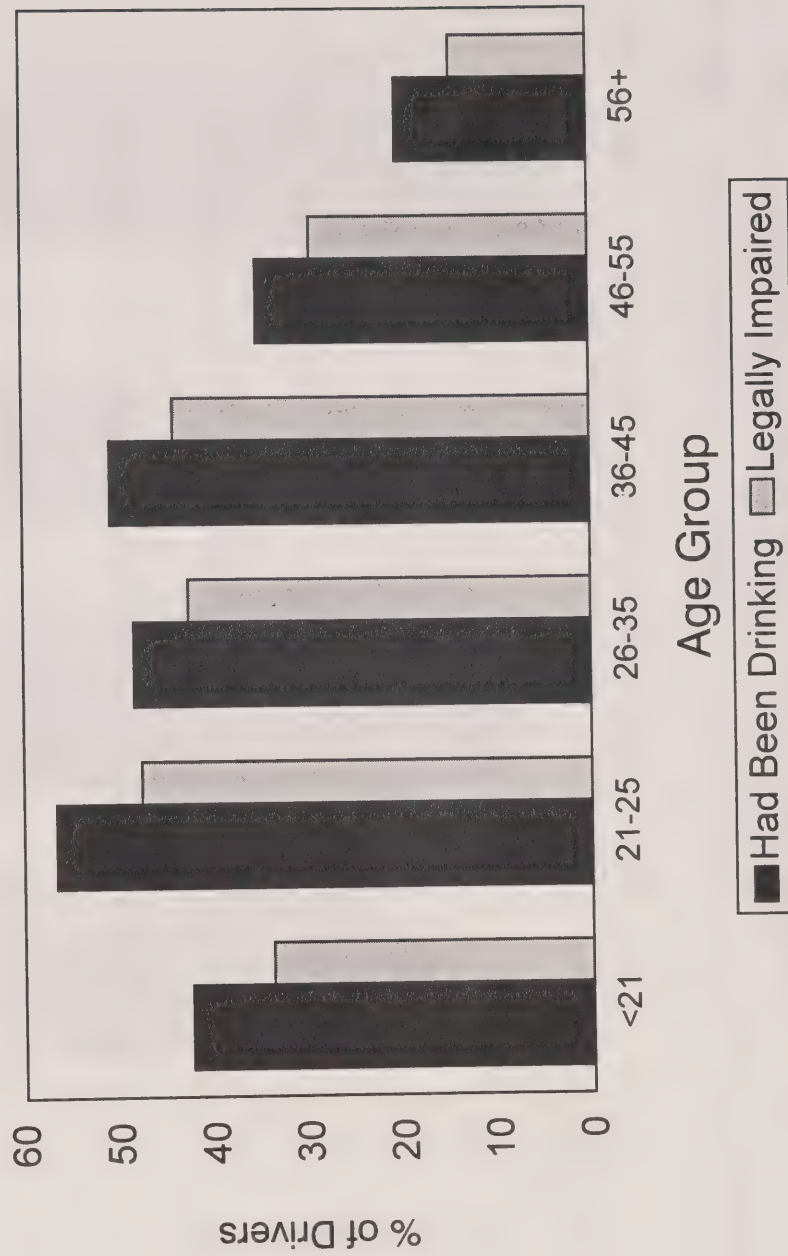


Figure 4

Type of Vehicle: Percentage of Fatally Injured Drivers Who Had Been Drinking (BAC 1 mg%>) and Were Impaired (BAC >80 mg%)

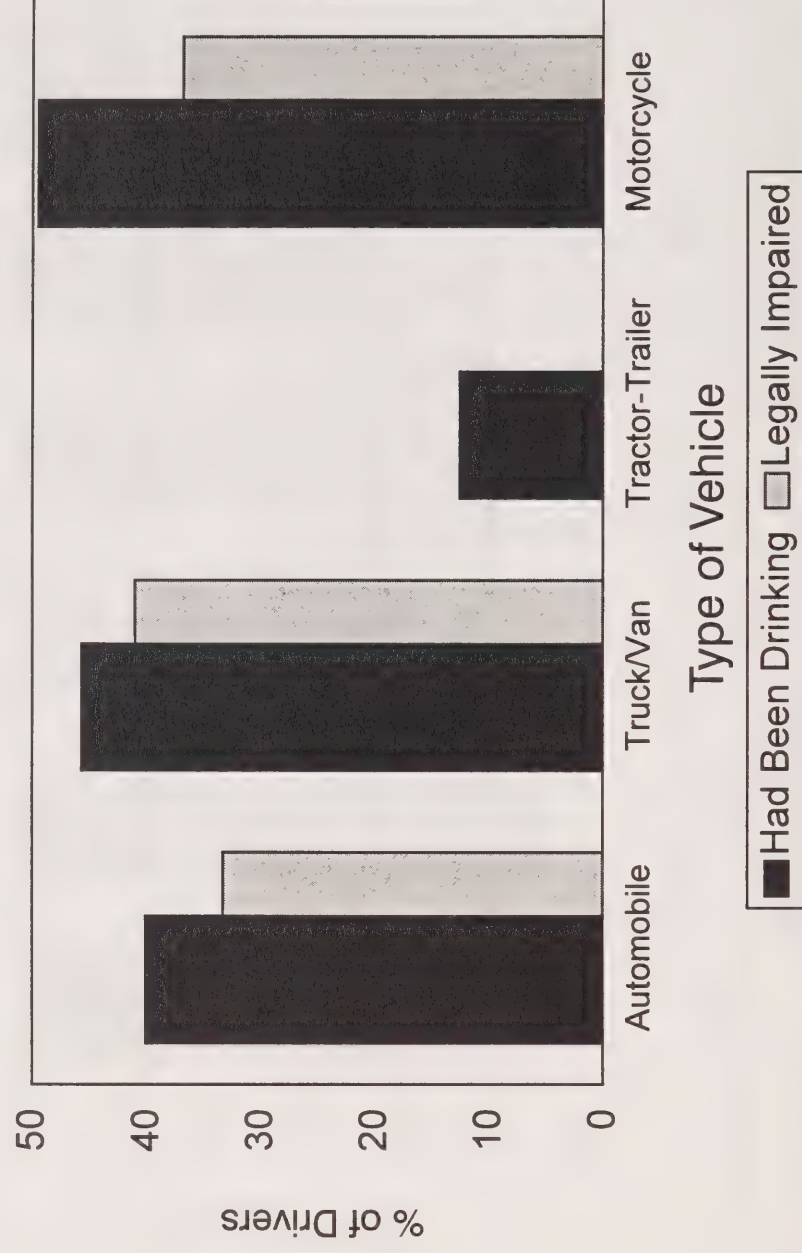


Figure 5
Trends in Alcohol Use Among Fatally
Injured Drivers (Canada): 1987-1996

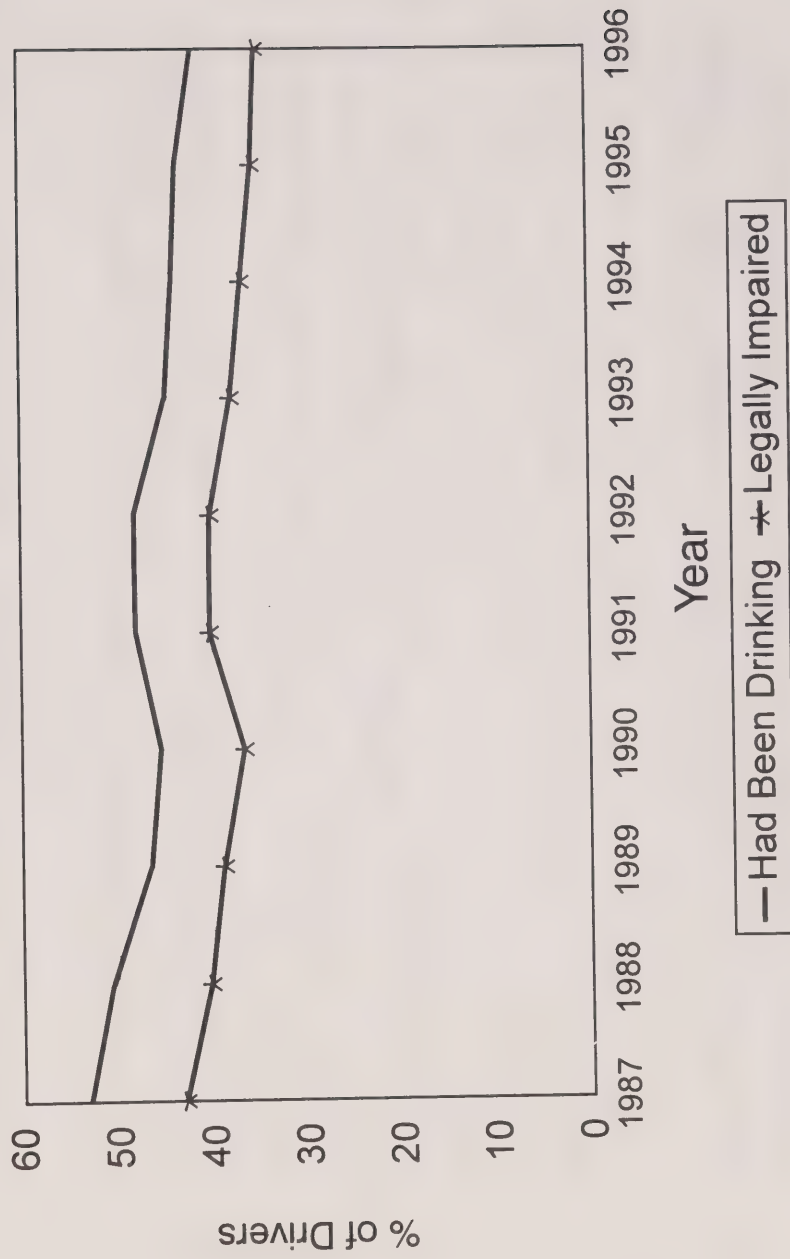


Figure 6
Trends in the Percentage of Male and Female
Drivers with Illegal BACs (Canada): 1987-1996

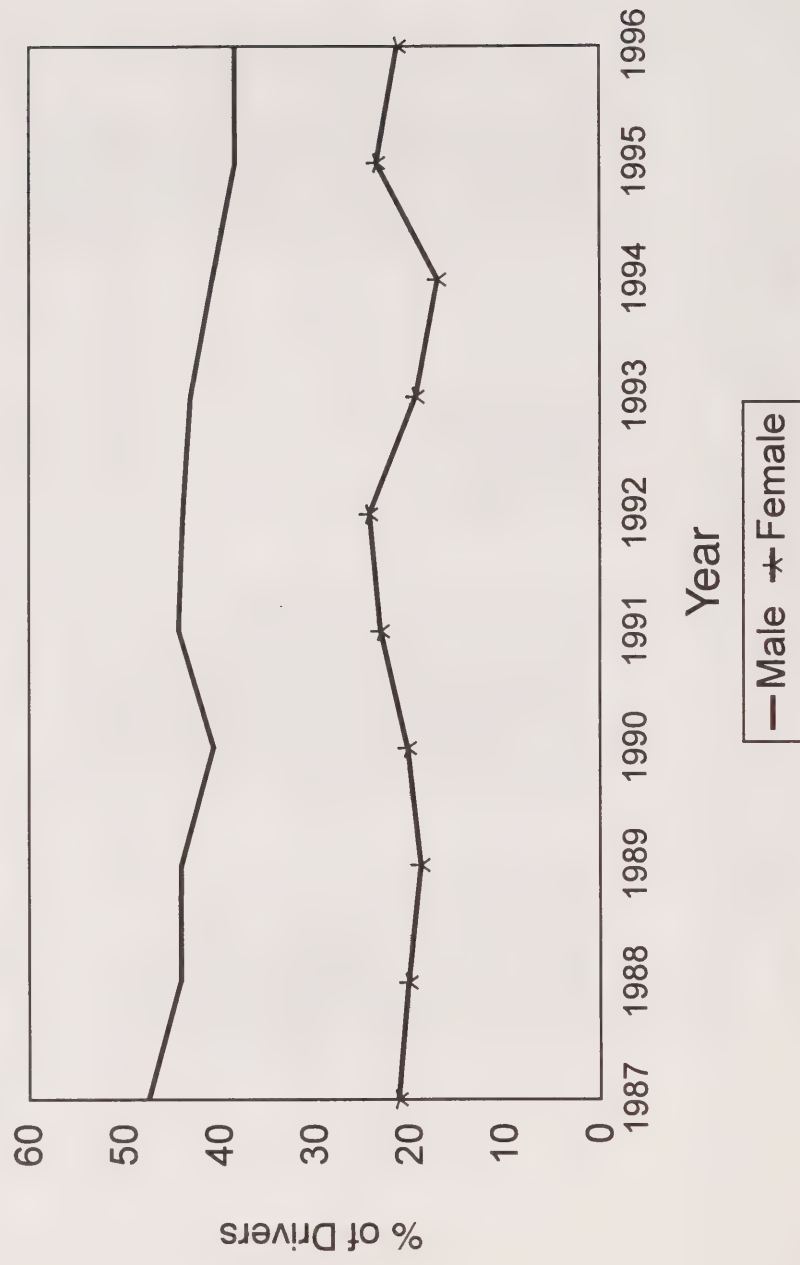


Figure 7
Trends in the Percentage of Fatally Injured Impaired Drivers in Various Age Groups (Canada): 1987-1996

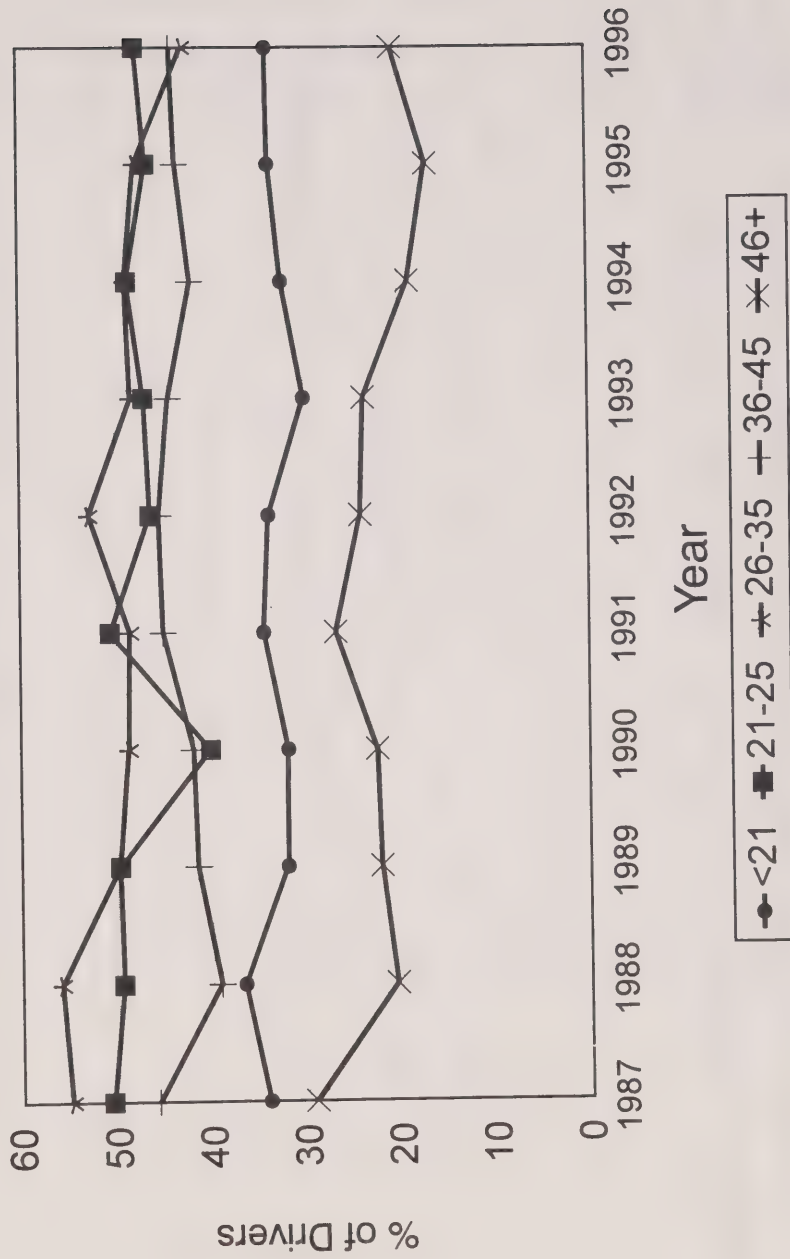


Figure 8
Trends in the Percentage of Fatally Injured Impaired
Drivers Operating Different Vehicles (Canada): 1987-1996

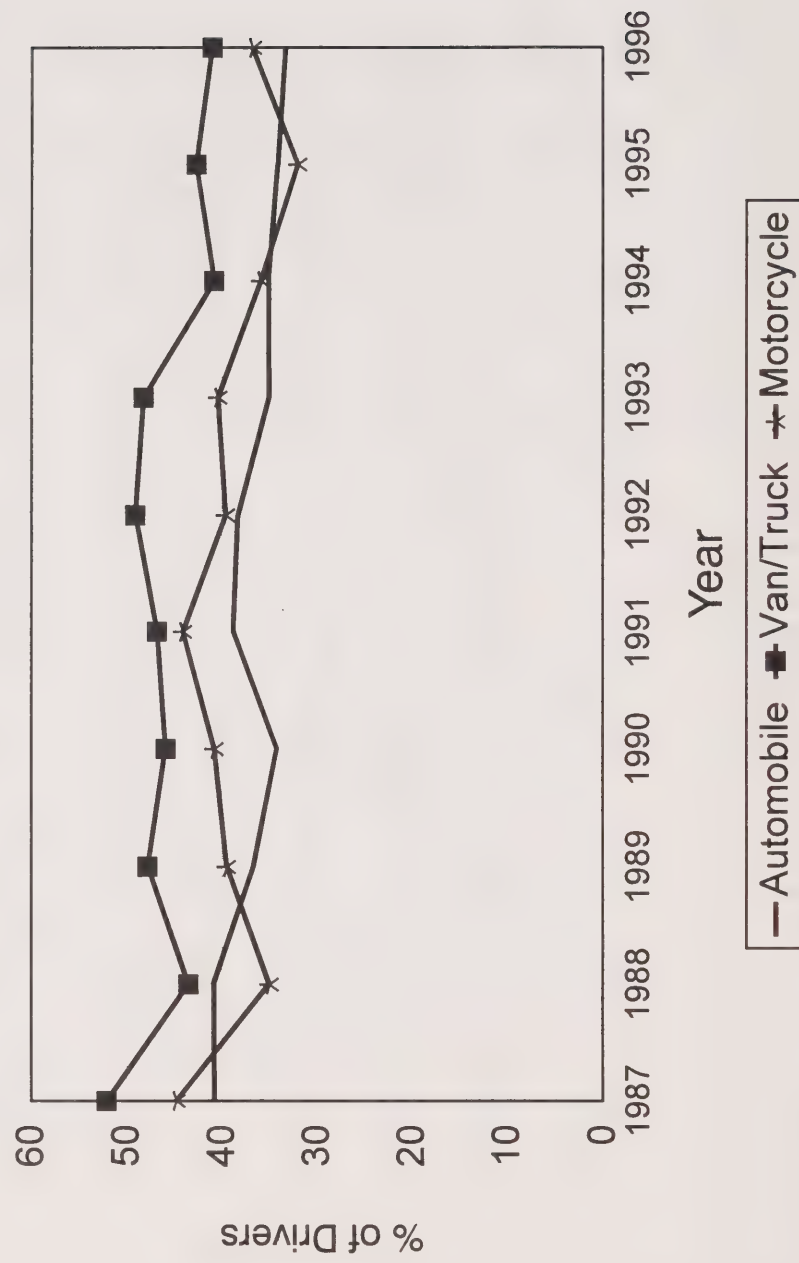


Table 1**Number of Fatally Injured Drivers and
Percentage Tested for Alcohol by Jurisdiction: 1996**

Jurisdiction	Number of Fatally Injured Drivers	Percentage of Fatally Injured Drivers Tested
British Columbia	248	89.1
Alberta	206	93.7
Saskatchewan	73	94.5
Manitoba	48	91.7
Ontario	523	82.2
Quebec	474	74.9
New Brunswick	58	86.2
Nova Scotia	57	71.9
Prince Edward Island	15	86.7
Newfoundland	18	72.2
Yukon	5	80.0
Northwest Territories	3	100.0
CANADA	1728	83.1

Table 2 Number of Fatally Injured Drivers Tested and Percentage Who Had Been Drinking (BAC 1 mg%>) and Were Impaired (BAC >80 mg%) by Jurisdiction: 1996			
Jurisdiction	Number of Drivers Tested	Percentage of Drivers Tested BAC 1 mg%> >80 mg%	
British Columbia	221	49.8	42.1
Alberta	193	37.3	30.6
Saskatchewan	69	40.6	34.8
Manitoba	44	56.8	50.0
Ontario	430	37.0	29.3
Quebec	355	42.3	36.9
New Brunswick	50	38.0	30.0
Nova Scotia	41	43.9	39.0
Prince Edward Island	13	30.8	23.1
Newfoundland	13	53.8	46.2
Yukon and NWT*	7	85.7	85.7
CANADA	1436	41.6	34.9

* The drivers for these two jurisdictions have been aggregated to ensure that the BAC of one of the drivers cannot be identified.

Table 3 Age of Driver: Number of Fatally Injured Drivers Tested and Percentage Who Had Been Drinking (BAC 1 mg%>) and Were Impaired (BAC >80 mg%) (Canada)			
Age	Number of Drivers Tested	Percentage of Drivers Tested BAC 1 mg%> >80 mg %	
<21	198	42.4	33.8
21-25	189	56.6	47.6
26-35	312	48.4	42.6
36-45	254	50.8	44.1
46-55	193	35.2	29.5
56+	290	20.3	14.5
TOTAL	1436	41.6	34.9

Table 4 Type of Vehicle: Number of Fatally Injured Drivers Tested and Percentage Who Had Been Drinking (BAC 1 mg%>) and Were Impaired (BAC >80 mg%) (Canada)			
Vehicle Type	Number of Drivers Tested	Percentage of Drivers Tested BAC 1 mg%> >80 mg%	
Automobile	925	40.1	33.3
Truck/Van	383	45.7	41.0
Tractor-trailer	32	12.5	0.0
Moped/Motorcycle	95	49.5	36.8
Other Vehicles*	1	100.0	100.0
TOTAL	1436	41.6	34.9

* Includes buses and emergency vehicles.

Table 5**Trends in Alcohol Use Among Fatally
Injured Drivers (Canada): 1987-1996**

Year	BAC 1 mg%>	>80 mg%
1987	53.1	43.1
1988	50.6	40.3
1989	46.5	38.8
1990	45.4	36.6
1991	48.0	40.2
1992	48.1	40.1
1993	44.7	37.8
1994	43.9	36.6
1995	43.4	35.4
1996	41.6	34.9

Table 6

**Trends in the Percentage of Male and Female Fatally
Injured Impaired Drivers (Canada): 1987-1996**

Year	Male	Female
1987	47.5	21.2
1988	44.1	20.1
1989	44.0	18.8
1990	40.6	20.2
1991	44.3	23.0
1992	43.8	24.2
1993	43.0	19.3
1994	40.7	17.0
1995	38.3	23.4
1996	38.4	21.2

Table 7**Trends in the Percentage of Fatally Injured Impaired Drivers
in Various Age Groups (Canada): 1987-1996**

Age	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<21	34.1	36.6	32.0	31.9	34.4	33.8	30.0	32.3	33.6	33.8
21-25	50.6	49.4	49.7	40.1	50.6	46.3	46.9	48.6	46.5	47.6
26-35	54.9	55.9	49.7	48.7	48.5	52.8	48.3	48.8	47.7	42.6
36-45	45.8	39.1	41.5	41.9	45.0	45.4	44.3	41.9	43.4	43.9
46+	29.2	20.5	22.1	22.5	26.8	24.1	23.7	18.9	16.9	20.5

Table 8**Trends in the Percentage of Fatally Injured Impaired Drivers
Operating Different Vehicles (Canada): 1987-1996**

Vehicle Type	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Automobile	40.8	40.9	36.7	34.2	38.8	38.3	35.0	35.1	34.1	33.3
Van/Truck	52.1	43.5	47.8	45.9	46.8	49.1	48.2	40.8	42.7	41.0
Motorcycle/Moped	44.8	35.0	39.5	40.8	44.1	39.6	40.4	35.9	32.0	36.8

Preliminary Fatality Statistics

During the first nine months of 1998, 1,986 road users died in reportable traffic collisions in Canada. This represents a decrease of 12% over the number of traffic deaths recorded during the same period last year, and a decrease of 15.1% compared to the average number of fatalities for this period during the last three years.

During this period, the numbers of motor vehicle driver, motor vehicle passenger, pedestrian and bicyclist fatalities (at 967, 511, 259 and 58) decreased by 13.8%, 12.0%, 13.1% and 6.5%, respectively, while the number of motorcyclists killed (at 142) increased significantly by 36.5% from the same period in 1997.

The projected traffic fatality total for Canada during 1998 is 2,672. This total represents a decrease of 12.0% over the number of road users killed in 1997, and a 15.1% decrease compared to the average number of traffic fatalities during the previous three years.

1998 Preliminary Fatality Statistics

	Month									Cumulative Total	Annual Projection	Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept			Jan-Sept Last Year	Jan-Sept Last 3 Years
Newfoundland	1	3	3	4	0	1	3	4	2	21	27	-19.2	-22.2
Prince Edward Island	3	2	3	1	1	2	0	2	0	14	19	-17.6	5.0
Nova Scotia	9	8	7	7	6	2	9	12	4	64	84	-3.0	-18.3
New Brunswick	4	1	4	3	8	9	15	13	7	64	85	-19.0	-18.3
Quebec	51	34	38	45	60	58	65	77	59	487	664	-14.0	-22.0
Ontario	60	43	50	46	64	57	78	78	79	555	743	-17.7	-20.9
Manitoba	4	2	5	6	14	9	15	12	9	76	105	1.3	-3.4
Saskatchewan	6	12	5	22	26	6	17	12	8	114	155	0.0	2.7
Alberta	19	24	30	29	40	33	29	32	29	265	363	-11.7	-7.8
British Columbia	29	20	35	35	39	34	39	43	39	313	408	5.4	-3.6
Yukon	0	0	0	0	0	1	1	5	1	8	13	166.7	50.0
Northwest Territories	1	1	0	0	0	0	1	2	0	5	6	-64.3	-48.3
CANADA	187	150	180	198	258	212	272	292	237	1,986	2,672	-12.0	-15.1

1998 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for the first nine months of 1998.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	96	42	37	1	0	11	187
February	91	33	21	1	0	4	150
March	82	49	38	1	2	8	180
April	97	54	26	5	11	5	198
May	125	81	25	5	20	2	258
June	102	69	15	6	17	3	212
July	126	66	34	11	30	5	272
August	135	68	29	15	38	7	292
September	113	49	34	13	24	4	237
Total	967	511	259	58	142	49	1,986

Fatality Trends By Road User Class and Province/Territory - 1997-1998

Following table presents comparisons of preliminary fatality statistics by road user class and province/territory for the first nine months of 1997 and 1998. This table includes only fatally injured victims whose road user class was known.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motocyclists		
	1997	1998	Change	1997	1998	Change	1997	1998	Change	1997	1998	Change	1997	1998	Change
foundland	15	11	-26.7%	5	8	60.0%	4	1	-75.0%	1	1	0.0%	0	0	0.0%
	8	5	-37.5%	3	9	200.0%	4	0	-100.0%	1	0	-100.0%	0	0	0.0%
Scotia	34	32	-5.9%	23	16	-30.4%	6	8	33.3%	2	1	-50.0%	1	6	500.0%
Brunswick	37	34	-8.1%	26	15	-42.3%	10	5	-50.0%	0	4	N/A	5	3	-40.0%
ec	275	236	-14.2%	121	95	-21.5%	78	67	-14.1%	26	15	-42.3%	35	55	57.1%
rio	353	276	-21.8%	165	145	-12.1%	98	76	-22.4%	20	26	30.0%	32	31	-3.1%
toba	42	35	-16.7%	23	23	0.0%	12	14	16.7%	2	2	0.0%	1	2	100.0%
atchewan	48	58	20.8%	40	32	-20.0%	12	12	0.0%	2	0	-100.0%	4	3	-25.0%
ta	159	131	-17.6%	78	72	-7.7%	34	28	-17.6%	3	2	-33.3%	6	21	250.0%
h Columbia	143	144	0.7%	92	91	-1.1%	37	45	21.6%	4	7	75.0%	20	21	5.0%
n	1	3	200.0%	2	4	100.0%	0	1	N/A	0	0	0.0%	0	0	0.0%
hwest Territories	7	2	-71.4%	3	1	-66.7%	3	2	-33.3%	1	0	-100.0%	0	0	0.0%
NADA	1,122	967	-13.8%	581	511	-12.0%	298	259	-13.1%	62	58	-6.5%	104	142	36.5%

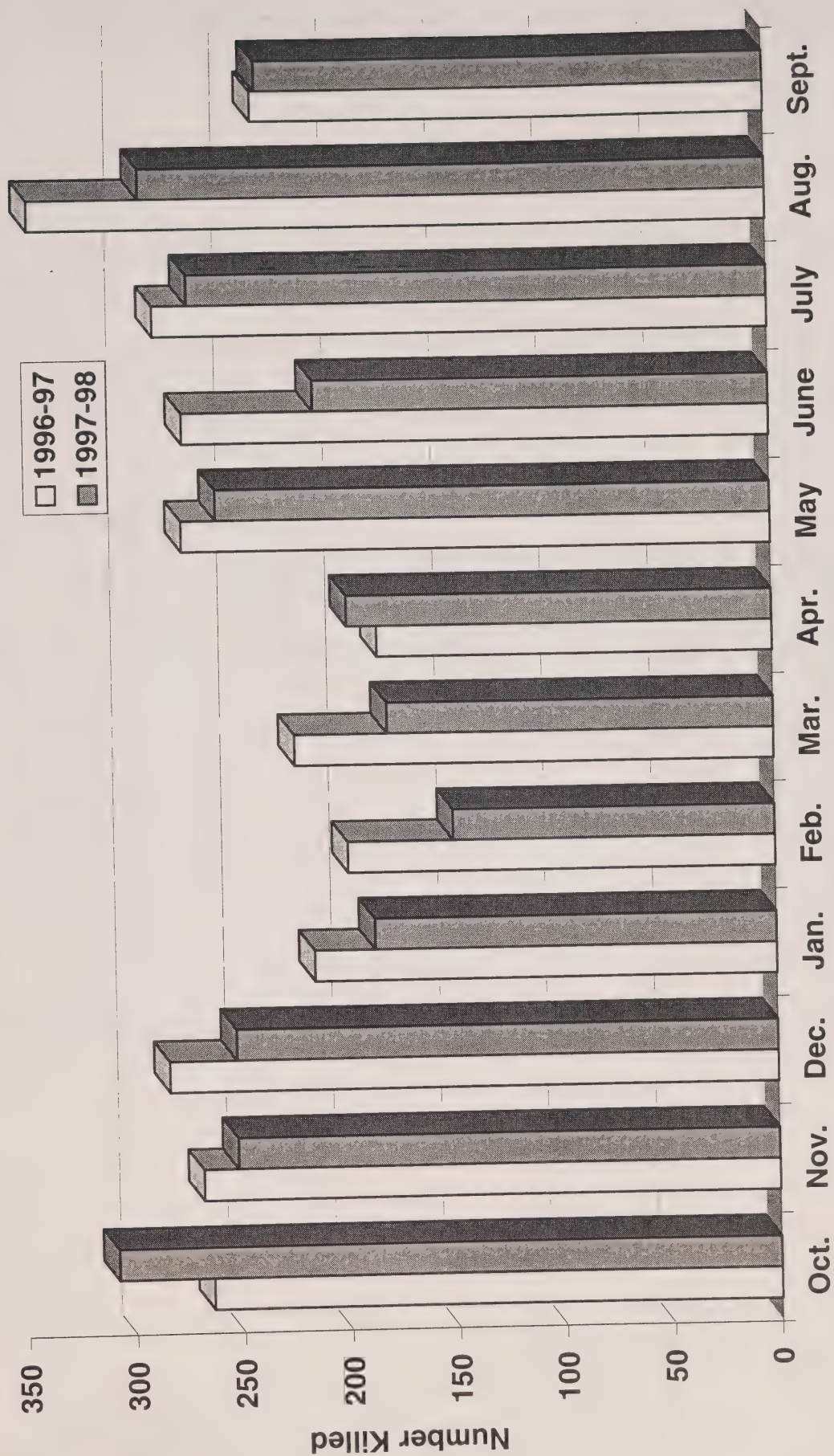
National Trend in Monthly Fatalities

October 1996 - September 1998

The following table and graph summarize fatalities for the last 12-month period (October 1997 - September 1998) and compare these data with statistics for the corresponding period of the previous year.

Month	Fatalities		Change
	1996	1997	1997/1996
October	264	308	16.7%
November	268	252	-6.0%
December	283	252	-11.0%
	1997	1998	1998/1997
January	215	187	-13.0%
February	199	150	-24.6%
March	223	180	-19.3%
April	184	198	7.6%
May	274	258	-5.8%
June	273	212	-22.3%
July	286	270	-5.6%
August	344	292	-15.1%
September	239	237	-0.8%
12 Month Total	3,052	2,796	-8.4%

Persons Killed In Reportable Traffic Collisions In Canada By Month of Occurrence 1996-97 - 1997-98



July 1999

Government
Publications

Preliminary Fatality Statistics

During 1998, 2,884 road users were fatally injured in reportable traffic collisions in Canada, a decrease of 5.9 percent from the number of traffic deaths recorded during the previous year, and a decrease of 8.9 percent compared to the average number of fatalities during the three-year period ending in 1997.

During this period, the number of fatally injured motor vehicle drivers, motor vehicle passengers and pedestrians (1,468, 711 and 391) decreased 5.7 percent, 13.1 percent and 2.0 percent, respectively, while the number of motorcyclists and bicyclists fatally injured in traffic collisions (157 and 75) increased 34.2 percent, and 3.6 percent, respectively, compared to fatalities among the same road user classes during the same period in 1997.

1998 Preliminary Fatality Statistics

	Month												Annual Total	Percent Change	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec		Last Year	Last 3 Years
Newfoundland	1	3	3	4	1	2	3	1	0	3	2	6	29	-9.4	-16.3
Prince Edward Island	3	2	3	1	1	2	0	2	0	2	3	2	21	5.0	14.5
Nova Scotia	9	8	7	7	6	2	9	12	4	3	8	9	84	-5.6	-18.4
New Brunswick	4	1	4	3	8	9	15	13	7	11	5	16	96	-8.6	-7.4
Quebec	56	35	40	46	60	58	68	77	61	67	69	80	717	-9.9	-15.8
Ontario	60	44	52	50	68	64	86	85	90	78	69	90	836	-6.1	-11.0
Manitoba	4	2	5	5	15	9	16	14	15	10	13	13	121	14.2	11.0
Saskatchewan	6	12	5	22	26	6	17	12	8	16	10	7	147	-10.9	-2.9
Alberta	19	24	31	29	41	34	31	39	37	42	50	36	413	-3.7	4.9
British Columbia	29	20	35	35	39	34	39	42	42	32	17	39	403	4.4	-4.8
Yukon	0	0	0	0	0	1	1	5	1	0	0	4	12	200.0	44.0
Northwest Territories	1	1	0	0	0	0	1	0	1	1	0	0	5	-64.3	-55.9
CANADA	192	152	185	202	265	221	286	302	266	265	246	302	2,884	-5.9	-8.9

1998 Fatalities by Road User Class and Month of Occurrence

The following table presents preliminary traffic fatality statistics by road user class and month of occurrence for 1998.

Month	Driver	Passenger	Pedestrian	Bicyclist	Motorcyclist	Unspecified	Total
January	97	43	38	1	0	13	192
February	91	34	21	1	0	5	152
March	85	51	38	1	2	8	185
April	99	53	26	6	11	7	202
May	131	82	25	5	21	1	265
June	106	71	16	5	20	3	221
July	133	73	36	11	28	5	286
August	141	69	33	15	36	8	302
September	124	57	42	15	24	4	266
October	149	52	39	4	14	7	265
November	142	50	41	4	1	8	246
December	170	76	36	7	0	13	302
Total	1,468	711	391	75	157	82	2,884

ality Trends by Road User Class and Province/Territory - 1997-1998

Following table presents comparisons of preliminary fatality statistics by road user class and province/territory during 1997 and 1998. This table includes only fatally injured victims whose road user class was 1.

	Motor Vehicle Drivers			Motor Vehicle Passengers			Pedestrians			Bicyclists			Motorcyclists		
	1997	1998	Change	1997	1998	Change	1997	1998	Change	1997	1998	Change	1997	1998	Change
foundland	18	15	-16.7%	7	8	14.3%	5	2	-60.0%	1	1	0.0%	1	1	0.0%
Prince Edward Island	10	10	0.0%	4	10	150.0%	4	1	-75.0%	1	0	-100.0%	0	0	0.0%
Scotia	45	51	13.3%	31	18	-41.9%	10	11	10.0%	2	1	-50.0%	1	1	0.0%
Brunswick	53	54	1.9%	32	25	-21.9%	14	7	-50.0%	0	3	N/A	5	4	-20.0%
ac	387	356	-8.0%	202	142	-29.7%	108	107	-0.9%	27	19	-29.6%	40	62	55.0%
io	472	432	-8.5%	219	215	-1.8%	131	117	-10.7%	23	35	52.2%	38	34	-10.5%
oba	55	59	7.3%	27	32	18.5%	19	24	26.3%	1	4	300.0%	1	2	100.0%
atchewan	76	77	1.3%	58	38	-34.5%	14	17	21.4%	2	0	-100.0%	4	3	-25.0%
a	239	211	-11.7%	111	110	-0.9%	45	44	-2.2%	3	2	-33.3%	7	25	257.1%
n Columbia	193	196	1.6%	121	107	-11.6%	46	57	23.9%	5	10	100.0%	20	25	25.0%
n	1	5	400.0%	3	5	66.7%	0	2	N/A	0	0	0.0%	0	0	0.0%
west Territories	7	2	-71.4%	3	1	-66.7%	3	2	-33.3%	1	0	-100.0%	0	0	0.0%
DA	1,556	1,468	-5.7%	818	711	-13.1%	399	391	-2.0%	66	75	13.6%	117	157	34.2%

Not Applicable

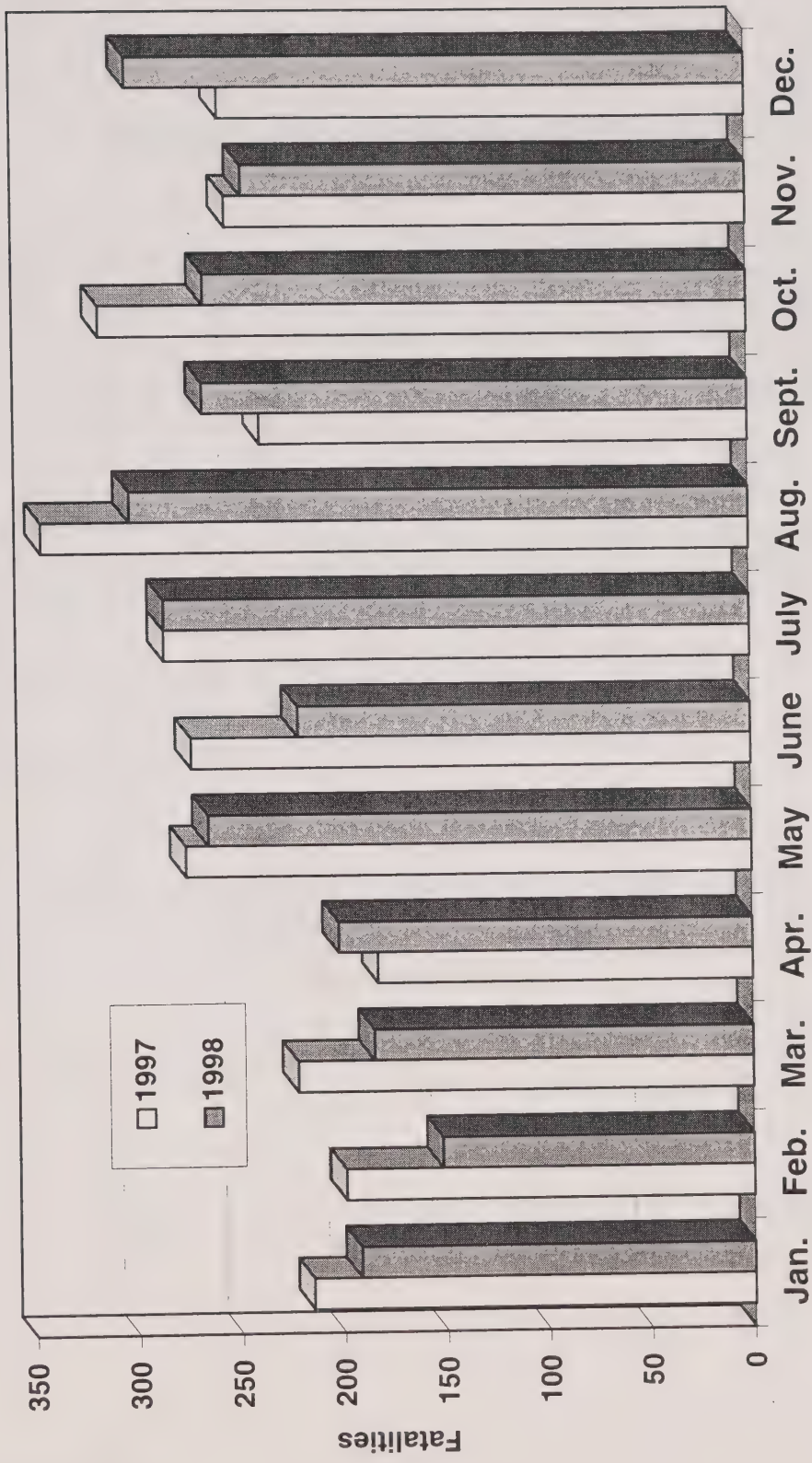
National Trend in Monthly Fatalities

January 1997 - December 1998

The following table and graph summarize fatalities for the last twelve-month period (January 1998 - December 1998) and compare these figures with statistics for the corresponding period of the previous year.

	Fatalities		Change
Month	1997	1998	1998/1997
January	215	192	-10.7%
February	199	152	-23.6%
March	222	185	-16.7%
April	183	202	10.4%
May	276	265	-4.0%
June	273	221	-19.0%
July	286	286	0.0%
August	345	302	-12.5%
September	238	266	11.8%
October	316	265	-16.1%
November	254	246	-3.1%
December	257	302	17.5%
12 Month Total	3,064	2,884	-5.9%

Road User Fatalities in Reportable Traffic Collisions in Canada by Month of Occurrence
1997-1998



September 1999

Results of Transport Canada's June 1999 Survey of Seat Belt Use in Canada

The National Occupant Restraint Program 2001 (NORP 2001) is an important element of *Road Safety Vision 2001* — an ambitious partnership approved by federal, provincial and territorial Ministers of Transport to make Canada's roads the safest in the world. The objective of NORP 2001 is to achieve a national seat belt usage rate of 95 percent for all occupants in light-duty vehicles (passenger cars, passenger vans and light trucks). Transport Canada's contribution to this program of monitoring seat belt usage rates in Canada is done through conducting an annual survey. The latest national survey of seat belt use took place between June 21 and June 27, 1999.

Results

For Canada as a whole, the estimated proportion of all occupants of light-duty vehicles using seat belts increased by 1.6 percent to 90.1 percent in June 1999, from 88.7 percent in June 1998 (see Table 1). This estimate is accurate within ± 1.0 percent 19 times out of 20 in repeated samples.

Other highlights of the 1999 survey of all occupants of light-duty vehicles for individual provinces and territories (in rounded percentages) are as follows:

- Two provinces have a seat belt use rate of 90 percent or more, down from three provinces having a 90 percent rate last year.
- Quebec leads the country with a usage rate of 93 percent, followed by Ontario at 91 percent.
- Seat belt wearing rates for other provinces and territories are: Alberta, British Columbia and Prince Edward Island at 89 percent; Saskatchewan at 88 percent; Nova Scotia at 87 percent; New Brunswick at 86 percent; Manitoba at 85 percent; Newfoundland at 83 percent; Yukon at 82 percent; and the Northwest Territories at 61 percent.

The high national wearing rate is the result of increased safety awareness by the motoring public as well as concerted efforts in the areas of policy-making, safety promotion and enforcement by the provincial and territorial governments, police forces and road safety associations.

Light Trucks and Passenger Vans

Table 3 presents the survey results of seat belt use by type of vehicle. As in previous surveys, this year's survey distinguished passenger vans from light trucks. The national results show that the use of seat belts by all occupants is 91 percent in passenger vans and 82 percent in light trucks.

Light trucks and passenger vans account for 31.4 percent of the vehicles included in the survey.

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Age Group

Table 4 presents the survey results of seat belt use by age group of vehicle occupants.

Within each category of vehicle, the use of seat belts by drivers increases as the age of the driver increases — the older the driver, the higher the seat belt use rate.

Survey Method

The June 1999 survey was undertaken at 241 sites selected by province, community size and road type, and is comparable to the samples used in the previous national seat belt use surveys.

For further information write to:

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Transport Canada
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Ottawa, Ontario
K1A 0N5

www.tc.gc.ca/roadsafety/rsindx_e.htm

Transport Canada
Survey of Seat Belt Use in Canada
June 1999

Table 1: Estimates of seat belt use from annual surveys 1992-1999 *

Prov./ Terr.	Percentage of all Occupants Wearing Seat Belts in Light-Duty Vehicles**						
	1992 June (%)	1993 June (%)	1994 June (%)	1996 June (%)	1997 July (%)	1998 June (%)	1999 June (%)
Nfld.	90.4	94.5	93.6	91.9	92.4	86.4	82.9
P.E.I.	76.9	77.8	84.5	87.5	82.6	82.7	88.5
N.S.	82.1	83.5	83.2	88.2	87.1	88.5	86.6
N.B.	77.9	82.1	84.9	86.6	86.5	87.9	85.9
Que.	86.0	88.8	89.8	90.3	91.7	92.3	93.0
Ont.	76.6	79.4	86.3	89.9	89.2	89.1	91.0
Man.	76.5	80.2	82.6	82.4	84.8	84.4	85.3
Sask.	88.7	89.4	87.7	89.6	91.7	89.7	88.2
Alta.	80.3	81.0	83.1	85.1	83.7	82.4	89.3
B.C.	87.1	86.4	88.3	88.7	89.4	89.7	89.2
Y.T.	60.1	72.8	68.2	81.2	83.4	82.1	82.1
N.W.T.	68.7	51.5	67.4	54.9	64.3	52.6	61.1
Canada	81.4	83.4	86.8	88.7	88.9	88.7	90.1

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

** Light-duty vehicles include passenger cars, passenger vans and light trucks.

Transport Canada
Survey of Seat Belt Use in Canada
June 1999

Table 2: Estimates of seat belt use from annual surveys 1991-1999*

Prov./ Terr.	Percentage of Passenger Car Drivers Wearing Seat Belts											
	1991	1991	1992	1992	1993	1993	1994	1994	1996	1997	1998	1999
	June	Oct.	June	Oct.	June	Oct.	June	Oct.	June	July	June	June
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Nfld.	91.6	90.6	93.9	94.8	96.7	97.5	95.7	95.7	94.3	95.2	90.8	86.9
P.E.I.	74.7	78.7	81.8	81.4	83.4	81.5	90.2	90.5	91.8	88.0	88.0	92.6
N.S.	83.9	86.3	85.5	86.3	87.4	86.3	87.0	90.5	91.2	90.1	91.2	89.8
N.B.	81.9	83.2	81.3	81.3	85.6	86.2	88.9	92.1	89.5	91.9	91.8	89.6
Que.	92.4	92.8	91.3	91.8	92.6	92.6	92.1	94.4	93.2	93.8	94.7	94.9
Ont.	79.7	83.2	80.5	84.1	84.0	83.6	88.8	91.0	92.3	91.4	91.5	92.4
Man.	79.4	79.9	81.6	80.2	82.9	83.3	86.1	85.8	85.0	87.3	87.6	87.9
Sask.	91.5	90.6	93.9	93.8	93.7	95.4	92.7	92.7	94.0	93.9	94.1	91.7
Alta.	84.4	83.2	86.3	84.8	86.6	88.3	87.8	88.5	89.8	87.5	87.8	91.6
B.C.	87.0	84.9	91.1	90.6	91.4	91.3	92.7	92.0	92.6	92.0	93.2	92.0
Y.T.	24.5	74.8	58.8	84.0	80.8	78.3	67.6	79.2	87.5	87.0	92.2	89.5
N.W.T.	74.4	75.6	64.7	69.5	59.8	60.2	75.5	77.9	57.8	73.0	54.6	64.4
Canada	85.1	86.0	85.9	87.1	87.8	87.8	90.1	91.6	91.9	91.5	91.9	92.3

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

Transport Canada
Survey of Seat Belt Use in Canada
June 1999

Table 3: Estimates of seat belt use from June 1999 survey, by type of vehicles and by driver and all occupants*

Prov./ Terr.	Passenger Cars		Passenger Vans**		Light Trucks		Total L-D Vehicles***	
	Driver	All Occ.****	Driver	All Occ.****	Driver	All Occ.****	Driver	All Occ.****
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Nfld.	86.9	84.2	84.8	82.6	78.2	75.8	85.3	82.9
P.E.I.	92.6	89.5	93.3	92.3	74.4	73.5	91.0	88.5
N.S.	89.8	88.8	81.7	83.2	71.9	73.2	86.7	86.6
N.B.	89.6	87.1	88.2	87.4	78.5	75.4	88.1	85.9
Que.	94.9	93.2	94.8	94.0	86.2	86.3	94.4	93.0
Ont.	92.4	91.3	91.8	91.4	87.5	86.2	91.9	91.0
Man.	87.9	86.2	86.0	86.3	74.3	73.0	86.3	85.3
Sask.	91.7	90.1	88.2	87.9	80.6	79.3	89.3	88.2
Alta.	91.6	90.3	90.5	89.9	80.5	80.6	90.2	89.3
B.C.	92.0	91.3	88.7	89.0	76.1	73.3	89.8	89.2
Y.T.	89.5	85.4	83.4	79.2	76.2	76.9	84.8	82.1
N.W.T.	64.4	60.6	69.4	68.2	51.6	53.4	62.6	61.1
Canada	92.3	91.0	91.2	90.8	83.4	82.4	91.1	90.1

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

**Passenger Vans, which include passenger vans and light trucks with back seats.

*** Light-duty (L-D) vehicles, which include passenger cars, passenger vans and light trucks.

****All occupants

Transport Canada
Survey of Seat Belt Use in Canada
June 1999

Table 4: Estimates of seat belt use from June 1999 survey, by type of vehicles and by age group of driver*

Prov./ Terr.	Passenger Cars			Passenger Vans**			Light Trucks			Total L-D Vehicles***		
	< 25	25-49	50+	< 25	25-49	50+	< 25	25-49	50+	< 25	25-49	50+
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Nfld.	82.0	86.8	89.6	84.7	85.1	84.7	75.4	78.1	79.4	81.8	85.3	86.9
P.E.I.	88.4	95.4	93.0	89.6	95.0	89.7	70.6	76.9	73.4	86.8	93.9	89.8
N.S.	88.4	90.1	90.3	82.6	80.7	81.6	77.6	70.1	74.7	86.9	86.4	87.3
N.B.	87.5	89.4	90.8	88.9	86.9	91.2	87.6	77.1	76.5	87.3	87.5	89.4
Que.	93.8	94.6	95.9	94.4	95.0	93.9	82.2	84.6	93.9	93.4	94.1	95.4
Ont.	90.9	92.6	92.8	91.7	91.7	92.6	89.1	86.5	89.7	90.6	91.9	92.6
Man.	77.5	88.0	90.7	90.3	85.0	87.6	53.6	73.7	80.1	77.4	86.0	89.3
Sask.	88.3	92.0	92.7	75.0	88.8	89.0	68.6	80.0	87.3	84.9	89.4	91.1
Alta.	87.8	92.1	93.4	82.2	91.5	87.9	74.7	82.7	81.0	86.5	90.8	91.3
B.C.	85.7	92.6	93.8	78.2	89.6	89.1	64.0	76.3	85.6	82.3	90.2	92.5
Y.T.	77.5	91.6	94.1	76.1	82.7	87.7	69.5	78.2	78.4	76.1	85.8	88.0
N.W.T.	50.0	68.8	76.1	61.8	69.5	86.6	50.9	57.6	24.6	51.4	66.9	65.7
Canada	89.5	92.5	93.4	88.7	91.4	91.3	80.1	82.9	87.6	88.2	91.1	92.4

*Note: Some jurisdictions have laws exempting certain individuals from wearing seat belts.

**Passenger Vans, which include passenger vans and light trucks with back seats.

*** Light-duty (L-D) vehicles, which include passenger cars, passenger vans and light trucks.

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December 1999

School Bus Collisions 1988-1997

Introduction

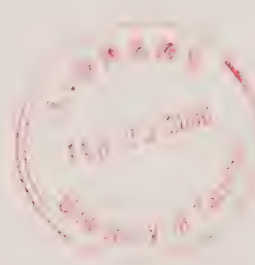
This report provides a statistical summary of collisions involving school buses over the 10-year period from 1988-1997. The report reviews the number of collisions involving at least one school bus, the number of school buses involved in collisions, and the resulting fatalities and personal injuries inside and outside the school bus.

Collision analysis also addresses ages of casualties; type and time of day of collision; number of incidents by year and point of impact on the school bus; and the vehicle manoeuvre that preceded the collision.

Summary Findings

Over the 10-year period, 1988 to 1997:

- A total of 29,488 school buses were involved in 29,193 collisions – 177 fatal, 5,659 personal-injury and 23,357 property-damage collisions.
- School bus collisions have resulted in 204 fatalities and 10,480 injuries – an average of 20 fatalities and 1,048 injuries per year.
- Of the 204 total fatalities, eight were school bus occupants (less than 19 years old) – an average of one death per year. Five of these eight fatalities occurred between 1989 to 1991; the remaining three occurred in 1994.
- The 5,836 casualty-producing collisions (i.e. fatal and injury-producing) involving at least one school bus represent approximately 0.3 percent of the 1,734,244 casualty-producing collisions involving all vehicle types.



Detailed Findings

All casualties of school bus collisions are presented in Table 1, with a breakdown by occupants of school buses (drivers and passengers), occupants of other vehicles and pedestrians. This is the only table in this report to include the occupants of other vehicles involved in collisions with school buses.

From 1988 to 1997, school buses were involved in 29,193 collisions: 177 fatal, 5,659 personal-injury and 23,357 property-damage collisions. The 29,193 collisions involved 29,488 school buses: 180 were involved in fatal collisions, 5,745 in personal-injury, and 23,563 in property-damage collisions.

In the 177 fatal collisions involving 180 school buses, there were 204 fatalities (an average of 20 per year). Of the 204 fatalities, 11 (5 percent) were school bus occupants (8 passengers and 3 drivers); 51 (25 percent) were pedestrians; and 142 (70 percent) were occupants of other vehicles involved in collisions with school buses.

Over the 10-year period, 5,745 school buses were involved in 5,659 personal injury collisions, resulting in 10,480 personal injuries (an average of 1,048 per year). Of the 10,480 injuries, 4,741 (45 percent) were school bus occupants; 650 (6 percent) were pedestrians; and 5,089 (49 percent) were occupants of other vehicles. Injuries¹ varied from minimal (where no treatment was required for minor abrasions and bruises) to major (where the victim was admitted to hospital for treatment or observation). Not all provinces and territories, however, report this level of breakdown.

Table 1. All Casualties in School Bus Collisions, 1988-1997

Year	Occupants of School Buses						Occupants of Other Vehicles		Pedestrians		Total Casualties	
	Driver		Passenger		Total							
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
1988	1	106	0	317	1	423	19	523	8	76	28	1,022
1989	1	123	2	338	3	461	21	587	6	83	30	1,131
1990	0	126	1	460	1	586	14	589	7	80	22	1,255
1991	1	91	2	516	3	607	21	560	8	73	32	1,240
1992	0	109	0	329	0	438	14	490	8	66	22	994
1993	0	88	0	309	0	397	10	466	2	62	12	925
1994	0	102	3	444	3	546	17	492	1	56	21	1,094
1995	0	108	0	384	0	492	11	490	2	69	13	1,051
1996	0	95	0	310	0	405	6	420	7	41	13	866
1997	0	87	0	299	0	386	9	472	2	44	11	902
Total	3	1,035	8	3,706	11	4,741	142	5,089	51	650	204	10,480

Table 2 presents 10-year totals of school bus occupant and pedestrian fatalities and injuries by age. Most school bus occupant fatalities were between the ages of 8 and 12, while the majority of occupants injured were between 5 and 17 years of age.

Table 2. School Bus Occupant and Pedestrian Casualties by Age, 1988-1997

Age	School Bus Occupants		Pedestrians		Total	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries
1	0	7	0	0	0	7
2	0	4	0	7	0	11
3	0	19	3	5	3	24
4	0	39	5	9	5	48
5	1	133	7	43	8	176
6	0	141	8	64	8	205
7	0	232	6	52	6	284
8	1	214	3	38	4	252
9	1	260	1	36	2	296
10	1	282	0	28	1	310
11	2	314	0	14	2	328
12	1	322	2	27	3	349
13	0	342	0	43	0	385
14	0	235	1	26	1	261
15	0	199	0	22	0	221
16	0	165	0	16	0	181
17	1	144	1	9	2	153
18	0	65	0	11	0	76
19+	3	1,342	13	183	16	1,525
Unknown	0	282	1	17	1	299
Total	11	4,741	51	650	62	5,391

School-age casualties can be determined from the above table; however, Table 3 is the only one in this report that focuses solely on school-age casualties (less than 19 years of age). The other tables include casualties of all ages.

Over the 10-year period, eight school bus occupants less than 19 years old were fatally injured – an average of one school bus occupant fatality per year. Of the school-age occupant fatalities, five were fatally injured from 1989 to 1991 and three occupants suffered fatal injuries in 1994.

From 1988 to 1997, 37 school-age pedestrians died in school bus collisions and 450 were injured. More than 70 percent of all school-age pedestrian fatalities in school bus collisions were between the ages of 4 and 7. Slightly more than half (52 percent) of all school-age pedestrians injured were between the ages of 5 and 9.

Table 3 presents the number of school-age (less than 19 years old) occupant and pedestrian fatalities and injuries by time of day. An average of five school-age children died in school bus collisions each year and 357 were injured. Of the fatalities, an average of one per year was a school bus occupant and four were pedestrians. Of the injuries, an average of 312 were school bus occupants and 45 were pedestrians.

More school-age pedestrian fatalities and injuries occurred in the afternoon than in the morning, with approximately one-third of the casualties occurring in collisions between 3:00 p.m. and 4:00 p.m. Seventy-five percent of school-age occupant fatalities occurred between 7:00 a.m. and 9:00 a.m. on the journey to school. Almost 42 percent of school-age occupant injuries occurred between 7:00 a.m. and 9:00 a.m. followed by 34 percent of occupant injuries occurring between 3:00 p.m. and 5:00 p.m.

Table 3. School-Age Casualties (Less Than 19 Years Old) by Time of Day, 1988-1997

Time of Day	School Bus Occupants		Pedestrians		Total	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries
12:00 - 6:59 a.m.	0	20	0	3	0	23
7:00 - 7:59 a.m.	4	237	2	21	6	258
8:00 - 8:59 a.m.	2	1,061	7	81	9	1,142
9:00 - 9:59 a.m.	0	179	1	5	1	184
10:00 - 10:59 a.m.	0	11	0	3	0	14
11:00 - 11:59 a.m.	0	123	3	35	3	158
12:00 - 12:59 p.m.	0	168	3	28	3	196
1:00 - 1:59 p.m.	0	42	0	8	0	50
2:00 - 2:59 p.m.	0	114	1	19	1	133
3:00 - 3:59 p.m.	1	712	12	147	13	859
4:00 - 4:59 p.m.	0	351	8	79	8	430
5:00 - 11:59 p.m.	1	88	0	16	1	104
Unknown	0	11	0	5	0	16
Total	8	3,117	37	450	45	3,567

Tables 4 and 5 present the number of school buses having at least one occupant casualty in single- and multi-vehicle collisions. Table 4 shows the number of buses and casualties by principal point of impact on the school bus. In collisions involving casualties to occupants of a school bus, the principal point of impact on the school bus was known for 73 percent of the buses involved. The greatest number of impact points (68 percent) were divided among the front (16 percent), rear (14 percent), left side (20 percent) and right side (18 percent). The number of principal points of impact reported as unknown, at 27 percent, includes one province and one territory that do not report this variable.

Between 1988 and 1997, 1,927 school buses were involved in collisions in which at least one occupant of a school bus was injured. The vast majority of those collisions (81 percent) involved another vehicle. In the 361 single-vehicle collisions, one occupant died and 1,163 occupants were injured. In the multi-vehicle collisions involving 1,566 school buses, 10 occupants perished and 3,578 were injured.

Although this information is not shown in a table, the first harmful events in the 361 single-vehicle collisions were as follows: running off the road – 98 collisions; striking a fixed object (ditch, post, guardrail, etc.) – 89 collisions; some other non-collision event – 86 collisions; striking a moving object (pedestrian, animal, train, etc.) – 18 collisions; overturning – 13 collisions; and other or unknown event – 57 collisions.

Table 4. School Buses Having Occupant Casualties by Principal Point of Impact on School Bus, 1988-1997

Primary Impact Location on School Bus	Type of Collision								
	Single-Vehicle			Multi-Vehicle			Total		
	# of Buses	Fatalities	Injuries	# of Buses	Fatalities	Injuries	# of Buses	Fatalities	Injuries
Front	50	0	139	257	1	617	307	1	756
Top	9	1	44	2	1	4	11	2	48
Rear	4	0	5	274	3	629	278	3	634
Left	38	0	112	350	0	862	388	0	974
Right	65	0	294	277	4	647	342	4	941
Undercarriage	9	0	17	3	0	4	12	0	21
Extensive	51	0	262	19	0	43	70	0	305
Unknown	135	0	290	384	1	772	519	1	1,062
Total	361	1	1,163	1,566	10	3,578	1,927	11	4,741

Table 5 shows the number of school buses having occupant casualties, by single and multi-vehicle collisions by year.

Table 5. School Buses Having Occupant Casualties by Year, 1988-1997

Year	Type of Collision								
	Single-Vehicle			Multi-Vehicle			Total		
	# of Buses	Fatalities	Injuries	# of Buses	Fatalities	Injuries	# of Buses	Fatalities	Injuries
1988	29	1	54	172	0	369	201	1	423
1989	46	0	105	177	3	356	223	3	461
1990	36	0	238	185	1	348	221	1	586
1991	42	0	172	144	3	435	186	3	607
1992	40	0	109	148	0	329	188	0	438
1993	44	0	113	137	0	284	181	0	397
1994	26	0	89	178	3	457	204	3	546
1995	45	0	154	148	0	338	193	0	492
1996	31	0	65	138	0	340	169	0	405
1997	22	0	64	139	0	322	161	0	386
Total	361	1	1,163	1,566	10	3,578	1,927	11	4,741

Table 6 shows the number of pedestrian casualties by vehicle manoeuvre of the striking vehicle. Over the 10-year period, an average of four pedestrians were fatally injured and 50 were injured each year when struck by school buses. An average of one fatality and 15 injuries occurred when pedestrians were struck by another vehicle or where the striking vehicle was not recorded.

Seventy-eight percent of the fatally injured pedestrians were struck by school buses and 10 percent were struck by another vehicle. In the remaining 12 percent of the pedestrian fatalities, the striking vehicle was not recorded.

Table 6. Pedestrian Casualties by Vehicle Manoeuvre of Striking Vehicle, 1988-1997

Vehicle Manoeuvre	Striking Vehicle							
	School Bus		Other Vehicle		Unknown Vehicle		Total	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries
Going Straight	16	214	5	62	1	16	22	292
Turning Left	4	79	0	0	0	1	4	80
Turning Right	6	71	0	0	0	5	6	76
Changing Lanes	0	1	0	0	0	0	0	1
Merging or Overtaking	0	6	0	9	0	5	0	20
Reversing	2	17	0	1	0	1	2	19
Slowing or Stopping	0	31	0	7	1	3	1	41
Stopped or Parked	2	7	0	2	1	13	3	22
Starting in Traffic	8	39	0	0	0	0	8	39
Starting from Parked Position	1	9	0	0	0	1	1	10
Entering Parked Position	0	9	0	0	0	0	0	9
Swerving to Avoid Object	0	0	0	0	0	0	0	0
Unknown	1	14	0	1	3	26	4	41
Total	40	497	5	82	6	71	51	650

Footnote: 'Not all provinces and territories report a breakdown of the data element "Injury Severity of person".

Source: Transport Canada, Road Safety and Motor Vehicle Regulation Directorate, Traffic Accident Information Database (TRAID)

To find out more about national road safety programs and initiatives, call Transport Canada toll free at 1-800-333-0371, or e-mail comments or questions to roadsafetywebmail@tc.gc.ca. You can also visit the Transport Canada web site at www.tc.gc.ca/roadsafety/.

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